



STIC Search Report

EIC 1700

STIC Database Tracking Number: 144010

TO: Sin J Lee
Location: REM 9D60
Art Unit : 1752
February 7, 2005

Case Serial Number: 10/669492

From: Usha Shrestha
Location: EIC 1700
REMSSEN 4B28
Phone: 571/272-3519
usha.shrestha@uspto.gov

Search Notes

As per our telephone conversation on February the 4th we have decided to include the set of L60 result for now and we have saved the L59 set, if you need to see it we could provide to you whenever needed. Thank you.



STIC Search Results Feedback Form

EIC17000

Questions about the scope or the results of the search? Contact *the EIC searcher* or contact:

Kathleen Fuller, EIC 1700 Team Leader
571/272-2505 REMSEN 4B28

Voluntary Results Feedback Form

- I am an examiner in Workgroup: Example: 1713
➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to EIC1700 REMSEN 4B28



SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Sin J. Lee Examiner #: 76060 Date: 1-27-05
 Art Unit: 1752 Phone Number 30 2-133 Serial Number: 10/669,492
 Mail Box and Bldg/Room Location: 9DE6 Results Format Preferred (circle) PAPER DISK E-MAIL
 (Rem.)

If more than one search is submitted, please prioritize searches in order of need.

 Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Plz. See Btb.
 Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search for the polymer

of cl. # 1

(2f too many,

then you can narrow the
 search to the polymer
 made from the monomer
 of claim # 6)

STAFF USE ONLY

Searcher: Ush

Searcher Phone #: _____

Searcher Location: _____

Date Searcher Picked Up: 2/3/05

Date Completed: 2/4/05

Searcher Prep & Review Time: 60

Clerical Prep Time: 30

Type of Search

NA Sequence (#) _____

AA Sequence (#) _____

Structure (#) 2

Bibliographic _____

Litigation _____

Fulltext _____

Patent Family _____

Vendors and cost where applicable

STN \$ 792.20

Dialog _____

Questel/Orbit _____

Dr.Link _____

Lexis/Nexis _____

Sequence Systems _____

WWW/Internet _____



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BIBDATASHEET

Bib Data Sheet

CONFIRMATION NO. 6800

SERIAL NUMBER 10/669,492	FILING DATE 09/24/2003 RULE	CLASS 430	GROUP ART UNIT 1752	ATTORNEY DOCKET NO. SR0021USNA
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APPLICANTS

William Brown Farnham, Hockessin, DE;
 Andrew Edward Feiring, Wilmington, DE;
 Frank Leonard Schadt III, Wilmington, DE; Weiming Qiu, Wilmington, DE;

** CONTINUING DATA *****
 This appln claims benefit of 60/415,855 10/03/2002 SJL

** FOREIGN APPLICATIONS *****
 None SJL

IF REQUIRED, FOREIGN FILING LICENSE GRANTED
 ** 12/19/2003

Foreign Priority claimed <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	STATE OR COUNTRY DE	SHEETS DRAWING 0	TOTAL CLAIMS 26	INDEPENDENT CLAIMS 5
35 USC 119 (a-d) conditions met <input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Met after Allowance	EXAMINER'S SIGNATURE <i>[Signature]</i>	INITIALS SJL		
Verified and Acknowledged				

ADDRESS

23906
 E I DU PONT DE NEMOURS AND COMPANY
 LEGAL PATENT RECORDS CENTER
 BARLEY MILL PLAZA 25/1128
 4417 LANCASTER PIKE
 WILMINGTON, DE
 19805

TITLE

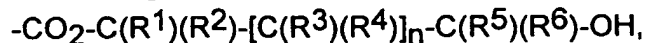
Photoresists with hydroxylated, photoacid-cleavable groups

FILING FEE	FEES: Authority has been given in Paper	<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees (Filing) <input type="checkbox"/> 1.17 Fees (Processing Ext. of
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Amendments to Claims

Claim 1 (Original): A photoresist comprising

a.) a polymer functionalized with at least one hydroxy ester functional group of the formula:



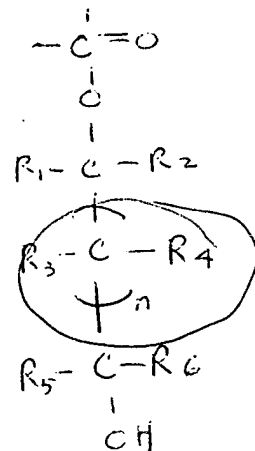
wherein

$n = 0, 1, 2, 3, 4$ or 5 ;

$\text{R}^1, \text{R}^2 = \text{C}_1 - \text{C}_6$ alkyl, $\text{C}_1 - \text{C}_6$ alkyl substituted with an ether oxygen; or R^1 and R^2 taken together form a 3- to 8-membered ring, optionally substituted with an ether oxygen, provided that the carbon attached to R^1 and R^2 is not at a bridgehead position;

$\text{R}^3, \text{R}^4 = \text{H}, \text{C}_1 - \text{C}_6$ alkyl, $\text{C}_1 - \text{C}_6$ alkyl substituted with an ether oxygen; or R^3 and R^4 taken together form a 3- to 8-membered ring, optionally substituted with an ether oxygen; $\text{R}^5, \text{R}^6 = \text{H}, \text{C}_1 - \text{C}_6$ alkyl, or $\text{C}_1 - \text{C}_6$ alkyl substituted with an ether oxygen; or R^5 and R^6 taken together form a 3- to 8-membered ring, optionally substituted with an ether oxygen; or R^1 and R^5 taken together with $-\text{C}(\text{R}^3)(\text{R}^4)_n-$ form a 4- to 8-membered ring, provided that the carbon attached to R^1 and R^2 is not at a bridgehead position; and

~~b.) a photoactive component.~~



Claim 2 (Original): The photoresist of Claim 1, wherein said polymer further comprises a fluoroalcohol group or a protected fluoroalcohol group.

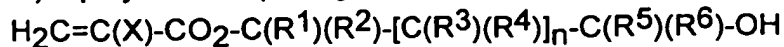
Claim 3 (Original): The photoresist of Claim 2, wherein the fluoroalcohol group or protected fluoroalcohol group is derived from at least one ethylenically unsaturated compound containing a fluoroalcohol group having the structure, $-\text{C}(\text{R}_f)(\text{R}_f')\text{OH}$, wherein R_f and R_f' are the same or different fluoroalkyl groups of from 1 to about 10 carbon atoms, or taken together are $(\text{CF}_2)_n$, wherein n is 2 to 10.

Claim 4 (Original): The photoresist of Claim 3, wherein R_f and R_f' are CF_3 .

Claim 5 (Original): The photoresist of Claim 1, wherein the hydroxy ester functional group is either PinAc or PinMAc.

Claim 6 (Original): A photoresist comprising

a.) a polymer comprising at least one repeat unit derived from



wherein X = H, C₁-C₆ alkyl, F, or F-substituted C₁-C₆ alkyl;

n = 0, 1, 2, 3, 4 or 5;

R¹, R² = C₁ - C₆ alkyl, C₁ - C₆ alkyl substituted with an ether oxygen; or R¹ and R² taken together form a 3- to 8-membered ring, optionally substituted with an ether oxygen, provided that the carbon attached to R¹ and R² is not at a bridgehead position;

R³, R⁴ = H, C₁ - C₆ alkyl, C₁ - C₆ alkyl substituted with an ether oxygen; or R³ and R⁴ taken together form a 3- to 8-membered ring, optionally substituted with an ether oxygen;

R⁵, R⁶ = H, C₁ - C₆ alkyl, or C₁ - C₆ alkyl substituted with an ether oxygen; or R⁵ and R⁶ taken together form a 3- to 8-membered ring, optionally substituted with an ether oxygen; or R¹ and R⁵ taken together with $-\text{C}(\text{R}^3)(\text{R}^4)_n-$ form a 4- to 8-membered ring, provided that the carbon attached to R¹ and R² is not at a bridgehead position; and

b.) a photoactive component.

Claim 7 (Original): The photoresist of Claim 6, wherein said polymer further comprises a repeat unit derived from an ethylenically unsaturated compound which contains at least one fluorine atom covalently attached to an ethylenically unsaturated carbon atom.

Claim 8 (Original): The photoresist of Claim 7, wherein the ethylenically unsaturated compound is selected from the group consisting of tetrafluoroethylene, chlorotrifluoroethylene, hexafluoropropylene, trifluoroethylene, vinylidene fluoride, vinyl fluoride, perfluoro-(2,2-dimethyl-1,3-dioxole), perfluoro-(2-methylene-4-methyl-1,3-dioxolane, $\text{CF}_2=\text{CFO}(\text{CF}_2)_t\text{CF}=\text{CF}_2$, where t is 1 or 2, and $\text{R}_f\text{OCF}=\text{CF}_2$, wherein R_f is a saturated fluoroalkyl group of from 1 to about 10 carbon atoms.

Claim 9 (Original): The photoresist of Claim 6, wherein said polymer further comprises a repeat unit derived from a polycyclic ethylenically unsaturated compound.

=> fil reg

FILE 'REGISTRY' ENTERED AT 14:55:15 ON 04 FEB 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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=> d his ful

FILE 'LREGISTRY' ENTERED AT 09:59:45 ON 04 FEB 2005
L1 STR

FILE 'REGISTRY' ENTERED AT 10:11:34 ON 04 FEB 2005
L2 41 SEA SSS SAM L1
L3 SCR 2043
L4 21 SEA SSS SAM L1 AND L3
L5 STR L1
L6 19 SEA SSS SAM L5 AND L3
D QUE STAT L6
L7 STR L5
L8 STR L5
L9 50 SEA SSS SAM L7 AND L8 AND L3
D QUE STAT L9
L10 STR L8
L11 50 SEA SSS SAM L7 AND L10 AND L3
L12 SCR 970
L13 50 SEA SSS SAM L7 AND L10 AND L12 AND L3
DEL LEE669/B
L14 84715 SEA SSS FUL L7 AND L10 AND L12 AND L3
SAV L14 LEE669/A

FILE 'HCAPLUS' ENTERED AT 11:06:35 ON 04 FEB 2005
L15 79655 SEA ABB=ON PLU=ON L14
L16 177957 SEA ABB=ON PLU=ON RESIST OR RESISTS OR PHOTORESIST?
OR MASK? OR PHOTOMASK?
L17 5368 SEA ABB=ON PLU=ON L15 AND L16
L18 3706 SEA ABB=ON PLU=ON L15(L)L16
L19 1513 SEA ABB=ON PLU=ON L18(L)PREP/RL
L20 867 SEA ABB=ON PLU=ON L19(L)COMPOSITION?
L21 26 SEA ABB=ON PLU=ON L20(L)SEMICONDUCTOR?
L22 1 SEA ABB=ON PLU=ON US20040126697/PN
L23 0 SEA ABB=ON PLU=ON L21 AND L22
L24 0 SEA ABB=ON PLU=ON L23 AND L20
L25 779 SEA ABB=ON PLU=ON L20 AND PHOTO?/SC
L26 95 SEA ABB=ON PLU=ON L25 AND SEMICONDUCTOR?
D FHITSTR
SEL L26 HIT RN 1-95
L27 36 SEA ABB=ON PLU=ON L26 AND (PHOTOACID? OR PHOTOACID(A)
CLEAV?)

L28 D FHITSTR
31 SEA ABB=ON PLU=ON L27 NOT (SI OR ?SILICON? OR
 ?SILAN? OR SILOXAN?)
 D FHITSTR
 SEL L28 HIT RN 1-31
L29 10 SEA ABB=ON PLU=ON L21 AND (PHOTOACID? OR PHOTOACID(A)
 CLEAV?)
L30 33 SEA ABB=ON PLU=ON L28 OR L29
 D QUE STAT L30

FILE 'REGISTRY' ENTERED AT 12:11:40 ON 04 FEB 2005

L31 79517 SEA ABB=ON PLU=ON L14 NOT 1-10/SI

FILE 'HCAPLUS' ENTERED AT 12:12:29 ON 04 FEB 2005

L32 78043 SEA ABB=ON PLU=ON L31
L33 26811 SEA ABB=ON PLU=ON L32(L) PREP/RL
L34 4828 SEA ABB=ON PLU=ON L33(L) ?RESIST?
L35 304 SEA ABB=ON PLU=ON L34 AND PHOTOACID?
L36 295 SEA ABB=ON PLU=ON L35 AND PHOTO?/SC
 D FHITSTR
 D HITSTR 2
 D HITSTR 3
L37 5 SEA ABB=ON PLU=ON L33(L) ?RESIST?(L) HYDROXYL?
 D QUE L6

FILE 'REGISTRY' ENTERED AT 12:21:36 ON 04 FEB 2005

L38 50 SEA SUB=L14 SSS SAM L5 AND L3
L39 7341 SEA SUB=L14 SSS FUL L5 AND L3
L40 6997 SEA ABB=ON PLU=ON L39 NOT 1-10/SI

FILE 'HCAPLUS' ENTERED AT 12:23:24 ON 04 FEB 2005

L41 4484 SEA ABB=ON PLU=ON L40
L42 2427 SEA ABB=ON PLU=ON L41(L) PREP/RL
L43 653 SEA ABB=ON PLU=ON L42(L) ?RESIST?
L44 142 SEA ABB=ON PLU=ON L43 AND PHOTOACID?
L45 141 SEA ABB=ON PLU=ON L44 AND (PHOTO?/SC OR 74/SC)
L46 136 SEA ABB=ON PLU=ON L45 AND P/DT
L47 5 SEA ABB=ON PLU=ON L45 NOT L46
L48 117 SEA ABB=ON PLU=ON L46 AND (1907-2002)/PRY,AY
L49 4 SEA ABB=ON PLU=ON L47 NOT 2003-2005/PY
L50 125 SEA ABB=ON PLU=ON L37 OR L48 OR L49
 D QUE L50
 D FHITSTR 1-3

FILE 'REGISTRY' ENTERED AT 13:35:18 ON 04 FEB 2005

L51 521 SEA ABB=ON PLU=ON L40 AND 2-40/F

FILE 'HCAPLUS' ENTERED AT 13:37:20 ON 04 FEB 2005

L52 278 SEA ABB=ON PLU=ON L51
L53 4 SEA ABB=ON PLU=ON L50 AND L52
L54 4 SEA ABB=ON PLU=ON L53 AND L43

FILE 'REGISTRY' ENTERED AT 13:39:14 ON 04 FEB 2005
L55 3163 SEA ABB=ON PLU=ON L31 AND 2-40/F

FILE 'HCAPLUS' ENTERED AT 13:39:36 ON 04 FEB 2005
L56 1710 SEA ABB=ON PLU=ON L55
L57 276 SEA ABB=ON PLU=ON L56 AND L34
L58 41 SEA ABB=ON PLU=ON L36 AND L57
D FHITSTR 1-3
L59 119 SEA ABB=ON PLU=ON L50 NOT L58
L60 45 SEA ABB=ON PLU=ON L58 OR L53 OR L54 OR L37
SAV L59 TEMP LEE669A/A

FILE 'REGISTRY' ENTERED AT 14:54:36 ON 04 FEB 2005
SAV L55 TEMP LEE669B/A

FILE 'REGISTRY' ENTERED AT 14:55:15 ON 04 FEB 2005

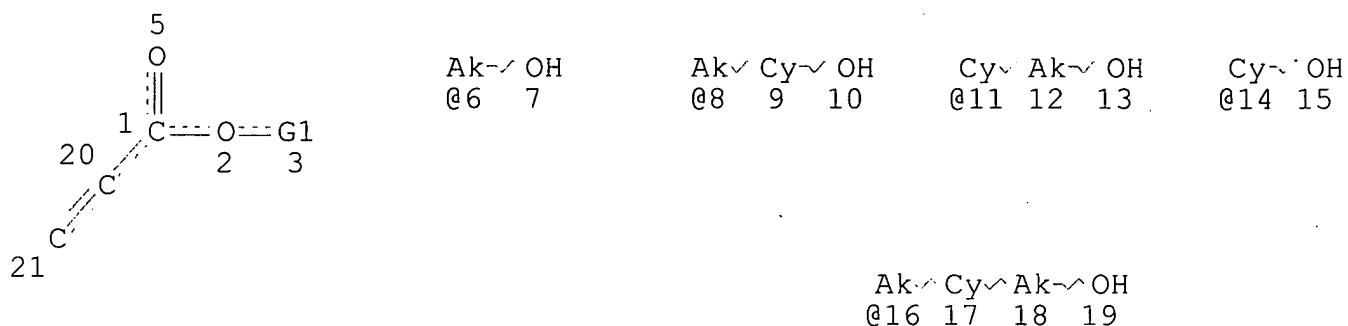
FILE LREGISTRY
LREGISTRY IS A STATIC LEARNING FILE

FILE REGISTRY
Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

FILE HCAPLUS

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=> d que stat l60
L3 SCR 2043
L5 STR



VAR G1=6/8/11/14/16

NODE ATTRIBUTES:

CONNECT IS E3 RC AT 1

DEFAULT MLEVEL IS ATOM

GGCAT IS BRA AT 6

GGCAT IS BRA AT 8

GGCAT IS BRA AT 12

GGCAT IS BRA AT 16

GGCAT IS BRA AT 18

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE

L7 STR

Ak~ OH Ak~ Cy~ OH Cy~ Ak~ OH Cy~ OH G1 20
 @6 7 @8 9 10 @11 12 13 @14 15

Ak~ Cy~ Ak~ OH
 @16 17 18 19

VAR G1=6/8/11/14/16

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

GGCAT IS BRA AT 6

GGCAT IS BRA AT 8

GGCAT IS BRA AT 12

GGCAT IS BRA AT 16

GGCAT IS BRA AT 18

DEFAULT ECLEVEL IS LIMITED

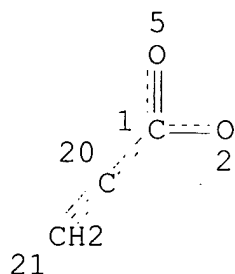
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE

L10 STR



NODE ATTRIBUTES:

CONNECT IS E3 RC AT 1

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE

L12 SCR 970

L14 84715 SEA FILE=REGISTRY SSS FUL L7 AND L10 AND L12 AND L3

L31 79517 SEA FILE=REGISTRY ABB=ON PLU=ON L14 NOT 1-10/SI

L32 78043 SEA FILE=HCAPLUS ABB=ON PLU=ON L31

L33 26811 SEA FILE=HCAPLUS ABB=ON PLU=ON L32 (L) PREP/RL

L34 4828 SEA FILE=HCAPLUS ABB=ON PLU=ON L33 (L) ?RESIST?

L35 304 SEA FILE=HCAPLUS ABB=ON PLU=ON L34 AND PHOTOACID?

L36 295 SEA FILE=HCAPLUS ABB=ON PLU=ON L35 AND PHOTO?/SC

L37 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L33 (L) ?RESIST? (L) HYDROXYL?

L39 7341 SEA FILE=REGISTRY SUB=L14 SSS FUL L5 AND L3

L40 6997 SEA FILE=REGISTRY ABB=ON PLU=ON L39 NOT 1-10/SI

L41 4484 SEA FILE=HCAPLUS ABB=ON PLU=ON L40

L42 2427 SEA FILE=HCAPLUS ABB=ON PLU=ON L41 (L) PREP/RL

L43 653 SEA FILE=HCAPLUS ABB=ON PLU=ON L42 (L) ?RESIST?

L44 142 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 AND PHOTOACID?

L45 141 SEA FILE=HCAPLUS ABB=ON PLU=ON L44 AND (PHOTO?/SC OR 74/SC)

L46 136 SEA FILE=HCAPLUS ABB=ON PLU=ON L45 AND P/DT

L47 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L45 NOT L46

L48 117 SEA FILE=HCAPLUS ABB=ON PLU=ON L46 AND (1907-2002)/PR

Y,AY

L49 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L47 NOT 2003-2005/PY
L50 125 SEA FILE=HCAPLUS ABB=ON PLU=ON L37 OR L48 OR L49
L51 521 SEA FILE=REGISTRY ABB=ON PLU=ON L40 AND 2-40/F
L52 278 SEA FILE=HCAPLUS ABB=ON PLU=ON L51
L53 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L50 AND L52
L54 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L53 AND L43
L55 3163 SEA FILE=REGISTRY ABB=ON PLU=ON L31 AND 2-40/F
L56 1710 SEA FILE=HCAPLUS ABB=ON PLU=ON L55
L57 276 SEA FILE=HCAPLUS ABB=ON PLU=ON L56 AND L34
L58 41 SEA FILE=HCAPLUS ABB=ON PLU=ON L36 AND L57
L60 45 SEA FILE=HCAPLUS ABB=ON PLU=ON L58 OR L53 OR L54 OR
L37

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 14:55:51 ON 04 FEB 2005

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=> d l60 1-45 ibib abs hitstr hitind

L60 ANSWER 1 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:13747 HCAPLUS

DOCUMENT NUMBER: 142:82309

TITLE: Chemically amplified alkali-developable
negative photoresist compositions with good
dry-etching and electron-beam resistance and
high resolution, and pattern formation using
them

INVENTOR(S): Iwashita, Atsushi; Ogata, Toshiyuki

PATENT ASSIGNEE(S): Tokyo Ohka Kogyo Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005003863	A2	20050106	JP 2003-166308	2003 0611

PRIORITY APPLN. INFO.:

JP 2003-166308

2003

0611

AB The photoresist compns. contain **photoacid** generators and polymers manufactured from ≥ 1 1st monomers selected from α -(hydroxyalkyl)acrylic acids, their alkyl esters, and hydroxyalkyl (meth)acrylates, ≥ 1 2nd monomers selected from other ethylenically unsatd. carboxylic acids and their esters, and 3rd monomers having fluorinated groups and alicyclic structures.

IT **815583-97-2P**

(alkali-developable neg. **photoresists** with high resolution and good **resistance** to dry etching and electron beams)

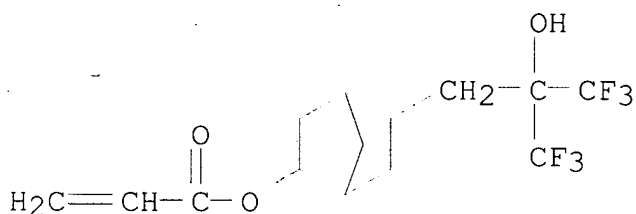
RN 815583-97-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-(hydroxymethyl)-2-propenoate and 5-[3,3,3-trifluoro-2-hydroxy-2-(trifluoromethyl)propyl]bicyclo[2.2.1]hept-2-yl 2-propenoate (9CI)
(CA INDEX NAME)

CM 1

CRN 815583-96-1

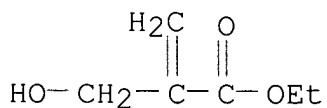
CMF C14 H16 F6 O3



CM 2

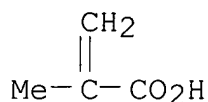
CRN 10029-04-6

CMF C6 H10 O3



CM 3

CRN 79-41-4
CMF C4 H6 O2



IC ICM G03F007-038
ICS C08F220-28; G03F007-033; H01L021-027
CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT **815583-97-2P**
(alkali-developable neg. **photoresists** with high
resolution and good **resistance** to dry etching and
electron beams)

L60 ANSWER 2 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:1128841 HCAPLUS
DOCUMENT NUMBER: 142:65327
TITLE: Positive-working photoresist composition
containing specific resin
INVENTOR(S): Kanda, Hiromi; Mizutani, Kazuyoshi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 39 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004361578	A2	20041224	JP 2003-158304	2003 0603
PRIORITY APPLN. INFO.:			JP 2003-158304	2003 0603

AB The title composition contains a resin, which increases the
solubility in an
alkali developer by an acid, and a **photoacid** generator,
wherein the resin has repeating unit: [-C(R1)(R2)-CH(O-R3)-]; and
[-C(R4)(R5)-C(R7)(O-R6)-] (R1-2, R4-5 = H, F, fluoroalkyl; R3 =

alkyl, -L-COOX, -L-OX; L = connecting group; X = H- or acid-sensitive group; R6 = H- or acid-sensitive group; R7 = F, fluoroalkyl). The composition is suitable for used with exposure

of ≤ 250 nm such as F2 excimer laser beam.

IT 811449-55-5DP, hydrolyzed
(resin in pos.-working **photoresist** composition)

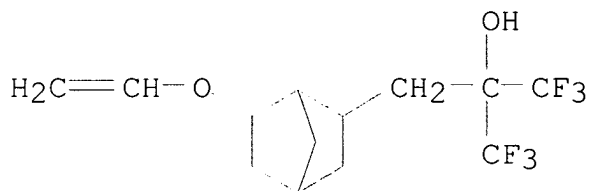
RN 811449-55-5 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with 6-(ethenyloxy)- α,α -bis(trifluoromethyl)bicyclo[2.2.1]heptane-2-ethanol and 3,3,3-trifluoro-1-propen-2-ol (9CI) (CA INDEX NAME)

CM 1

CRN 811449-54-4

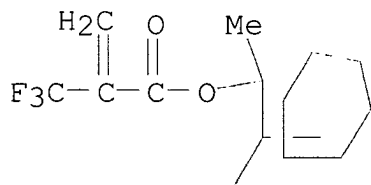
CMF 'C13 H16 F6 O2



CM 2

CRN 188739-86-8

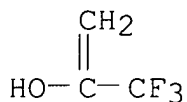
CMF C15 H19 F3 O2



CM 3

CRN 14678-34-3

CMF C3 H3 F3 O



IC ICM G03F007-039
 ICS C08F216-14; C08F220-24; C08F232-00; H01L021-027
 CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 Section cross-reference(s): 38
 IT 66003-78-9 301664-71-1 470482-89-4
 (photoacid generator in pos.-working photoresist
 composition)
 IT 110-87-2DP, Dihydropyran, reaction product with hydroxyvinyl
 polymer **811449-55-5DP**, hydrolyzed **811449-55-5DP**
 , hydrolyzed, reaction products with dihydropyran 811449-56-6DP,
 hydrolyzed, reaction product with dihydropyran 811449-57-7DP,
 hydrolyzed, reaction product with dihydropyran 811449-58-8DP,
 hydrolyzed, reaction product with dihydropyran 811449-59-9DP,
 hydrolyzed 811449-60-2DP, hydrolyzed, reaction product with
 dihydropyran
 (resin in pos.-working **photoresist** composition)

L60 ANSWER 3 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:1125837 HCAPLUS

DOCUMENT NUMBER: 142:82287

TITLE: Chemically amplified positive photoresist
 compositions with good alkali developability,
 line edge roughness, and transparency to F2
 excimer laser beams

INVENTOR(S): Kanda, Hiromi; Mizutani, Kazuyoshi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 40 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2004361579	A2	20041224	JP 2003-158305	

2003
0603

PRIORITY APPLN. INFO.:

JP 2003-158305

2003

0603

AB The compns. comprise (A) **photoacid** generators and (B) resins that increase their alkali solubility in the presence of acids, wherein the resins have repeating units $CR_1R_2C(OR_3)R_0$ ($R_0 = F$, fluoroalkyl; $R_1, R_2 = H, F$, fluoroalkyl; $R_3 = alkyl, L(CO_2X)n_1, L(OX)n_2$; $L = linking\ group$; $X = H, acid-dissociable\ group$; $n_1, n_2 = 1-3$). The resins may further have vinyl ether-based repeating units.

IT **811804-82-7P 811804-86-1P 811804-93-0P**

(chemical amplified pos. **photoresists** with good alkali developability, line edge roughness, and transparency to F2 excimer laser beams)

RN 811804-82-7 HCAPLUS

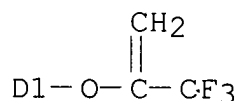
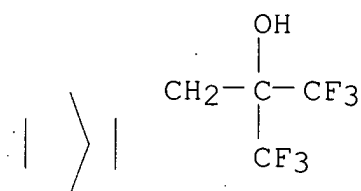
CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with α, α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol and α, α -bis(trifluoromethyl)-5(or 6)-[[1-(trifluoromethyl)ethenyl]oxy]bicyclo[2.2.1]heptane-2-ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 811804-81-6

CMF C14 H15 F9 O2

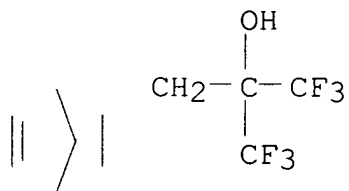
CCI IDS



CM 2

CRN 196314-61-1

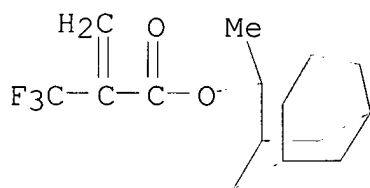
CMF C11 H12 F6 O



CM 3

CRN 188739-86-8

CMF C15 H19 F3 O2



RN 811804-86-1 HCAPLUS

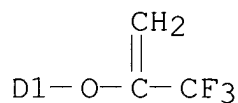
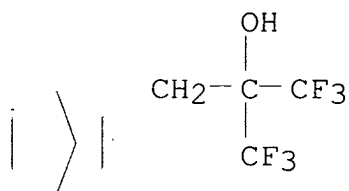
CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with α,α -bis(trifluoromethyl)-5(or 6)-[[1-(trifluoromethyl)ethenyl]oxy]bicyclo[2.2.1]heptane-2-ethanol (9CI)
(CA INDEX NAME)

CM 1

CRN 811804-81-6

CMF C14 H15 F9 O2

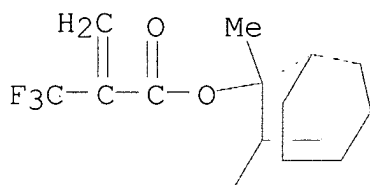
CCI IDS



CM 2

CRN 188739-86-8

CMF C15 H19 F3 O2



RN 811804-93-0 HCAPLUS

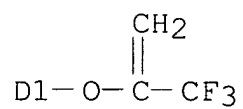
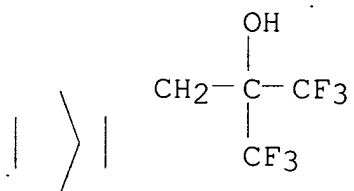
CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with α,α -bis(trifluoromethyl)-5(or 6)-[[1-(trifluoromethyl)ethenyl]oxy]bicyclo[2.2.1]heptane-2-ethanol and 5(or 6)-(ethenyloxy)- α,α -bis(trifluoromethyl)bicyclo[2.2.1]heptane-2-ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 811804-81-6

CMF C14 H15 F9 O2

CCI IDS

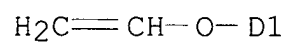
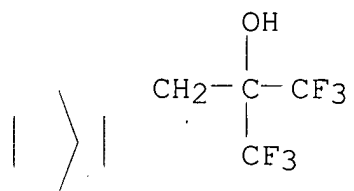


CM 2

CRN 634200-89-8

CMF C13 H16 F6 O2

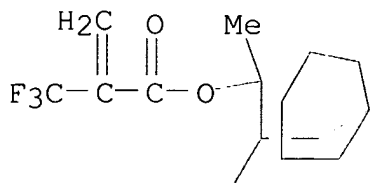
CCI IDS



CM 3

CRN 188739-86-8

CMF C15 H19 F3 O2



IC ICM G03F007-039
 ICS C08F216-14; C08F220-24; C08F232-00; H01L021-027
 CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 Section cross-reference(s): 38
 IT **811804-82-7P 811804-86-1P** 811804-91-8P
811804-93-0P 811804-99-6P 811805-03-5P
 (chemical amplified pos. **photoresists** with good alkali
 developability, line edge roughness, and transparency to F2
 excimer laser beams)

L60 ANSWER 4 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:1014647 HCAPLUS
 DOCUMENT NUMBER: 142:29995
 TITLE: Positive-working UV-photoresist composition
 INVENTOR(S): Kanda, Hiromi; Mizutani, Kazuyoshi
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 47 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004334135	A2	20041125	JP 2003-156540	2003 0602
PRIORITY APPLN. INFO.:			JP 2003-66807	A 2003 0312

AB Disclosed is the pos.-working UV-photoresist composition comprising an alkali-developable resin having a repeating unit [R₁R₂C-CCN(OR₃)] (R_{1,2} = H, F, fluoroalkyl; L = single bond, divalent bond; R₃ = H, polar group, group becoming acid soluble upon interaction with acid) and a **photoacid**. The composition exhibited sufficient

transparency for a 157-nm light source.

IT **799840-40-7P**

(pos.-working UV-**photoresist** composition)

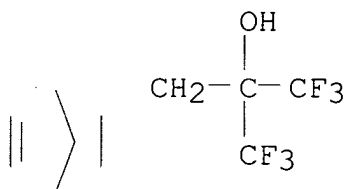
RN 799840-40-7 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol and 2-(hydroxymethyl)-2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

CRN 196314-61-1

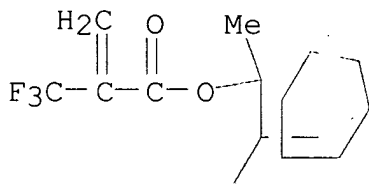
CMF C11 H12 F6 O



CM 2

CRN 188739-86-8

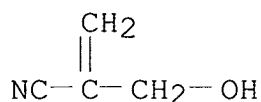
CMF C15 H19 F3 O2



CM 3

CRN 23873-54-3

CMF C4 H5 N O



IC ICM G03F007-039
 ICS C08F220-42; H01L021-027
 CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 ST pos vacuum UV photoresist compn **photoacid** alkali sol
 resin
 IT 66003-78-9 144317-44-2 470482-89-4
 (**photoacid**; pos.-working UV-photoresist composition)
 IT **799840-40-7P** 799840-48-5P
 (pos.-working UV-**photoresist** composition)

L60 ANSWER 5 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:935362 HCAPLUS
 DOCUMENT NUMBER: 141:403484
 TITLE: The chemically amplified photoresist
 composition and the pattern formation method
 INVENTOR(S): Kanna, Shinichi; Takahashi, Omote
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 86 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004310007	A2	20041104	JP 2003-298909	2003 0822
PRIORITY APPLN. INFO.:			JP 2003-85456	A 2003 0326

AB The disclosed **photoacid** generation type resist composition
 comprises (1) F-containing resin whose solubility in alkaline
 developer
 increases greatly in the presence of an acid; (2)
photoacid generating compound, (3) a specified amphoteric
 substance, and (4) a solvent. Patterning process which uses the
 resist composition and F2 excimer laser is also disclosed. The resist

composition has good coatability, development characteristics, and etching resistance.

IT **611209-36-0P 786702-64-5P**

(**photoresist** compns. containing **photoacid** generator and)

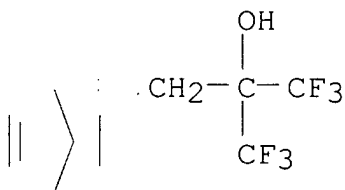
RN 611209-36-0 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol and tetrafluoroethene (9CI) (CA INDEX NAME)

CM 1

CRN 196314-61-1

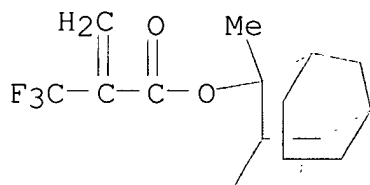
CMF C11 H12 F6 O



CM 2

CRN 188739-86-8

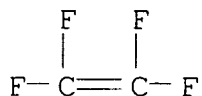
CMF C15 H19 F3 O2



CM 3

CRN 116-14-3

CMF C2 F4



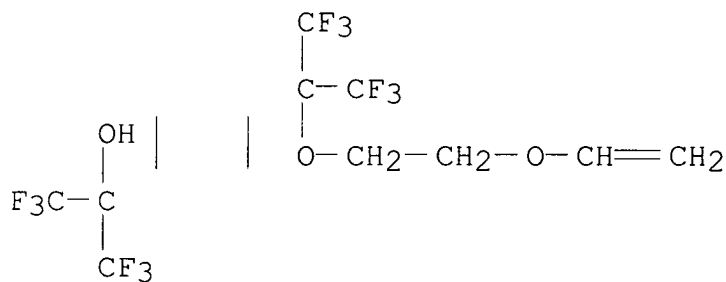
RN 786702-64-5 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 3-hydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl ester, polymer with 4-[1-[2-(ethenyloxy)ethoxy]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]- α,α -bis(trifluoromethyl)cyclohexanemethanol and 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-(trifluoromethyl)-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 654076-29-6

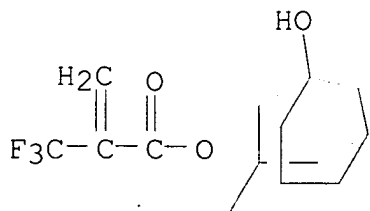
CMF C16 H18 F12 O3



CM 2

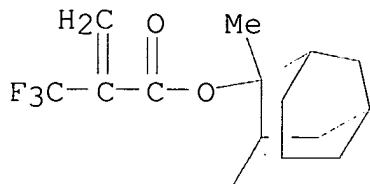
CRN 521913-15-5

CMF C14 H17 F3 O3



CM 3

CRN 188739-86-8
CMF C15 H19 F3 O2



- IC ICM G03F007-039
ICS G03F007-004; H01L021-027
- CC 74-5 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
Section cross-reference(s): 35
- ST **photoacid** generation photoresist fluoropolymer
- IT Photoresists
(**photoacid** generation type; fluorine-containing resins for)
- IT 484-47-9, 2,4,5-Triphenylimidazole 2052-49-5, Tetrabutylammonium hydroxide 3001-72-7, 1,5-Diazabicyclo(4,3,0)non-5-ene 7560-83-0, Dicyclohexyl methyl amine 29836-26-8 86303-22-2 86303-23-3 153152-51-3 786702-61-2 786702-62-3 786702-63-4
(**photoacid** generation type resist compns. containing fluoro-containing resin and)
- IT 144317-44-2, Triphenylsulfonium nonafluorobutanesulfonate
(**photoacid** generator; photoresist compns. containing fluoro-containing resin and)
- IT **611209-36-0P** 672937-76-7P 672937-79-0P 679804-77-4P
731861-92-0P 731861-93-1P 766547-22-2P 766547-24-4P
786702-64-5P
(**photoresist** compns. containing **photoacid** generator and)
- IT 654076-29-6P 679804-75-2P
(preparation and reaction in synthesis of fluorine-containing polymers for **photoacid** generation type resists)
- IT 110-75-8, 2-Chloroethyl vinyl ether 122085-43-2 679804-74-1
(reaction in synthesis of fluorine-containing polymers for **photoacid** generation type resists)

L60 ANSWER 6 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:904407 HCAPLUS
DOCUMENT NUMBER: 141:386381
TITLE: Positive-working resist composition containing

INVENTOR(S): alkali-soluble resins and **photoacids**
 PATENT ASSIGNEE(S): Mizutani, Kazuyoshi
 SOURCE: Fuji Photo Film Co., Ltd., Japan
 Jpn. Kokai Tokkyo Koho, 71 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004302200	A2	20041028	JP 2003-95806	2003 0331

PRIORITY APPLN. INFO.:

JP 2003-95806

2003
0331

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT
*

AB Disclosed is the pos.-working resist composition comprising (A) a resin which has ≥ 1 repeating unit represented by I and ≥ 1 repeating unit represented by II (Ra-c = H, F, fluoroalkyl; L1 = single bond, divalent bond; X = H, acid-decomposable group; n = 0, 1; Q = H, OH; Z = O, S, etc.; and Z' = O, S, etc.) and increases its solubility to an alkali developer upon the interaction with an acid

and (B) a **photoacid**. The composition exhibited sufficient optical transparency at 157 nm.

IT **782501-29-5P 782501-31-9P**

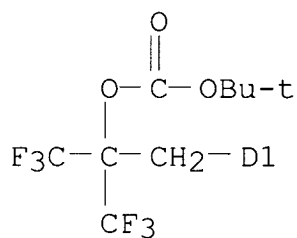
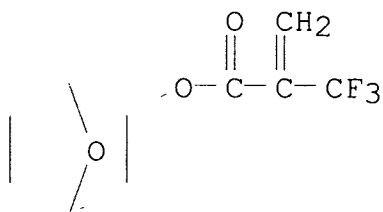
(pos.-working **resist** composition containing alkali-soluble resin and **photoacid**)

RN 782501-29-5 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 5(or 6)-[2-[[[(1,1-dimethylethoxy)carbonyl]oxy]-3,3,3-trifluoro-2-(trifluoromethyl)propyl]-7-oxabicyclo[2.2.1]hept-2-yl ester, polymer with α, α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

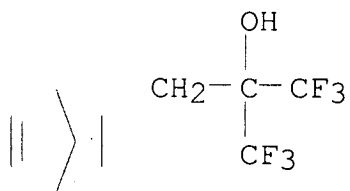
CM 1

CRN 782501-28-4
 CMF C19 H21 F9 O6
 CCI IDS



CM 2

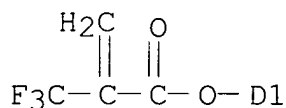
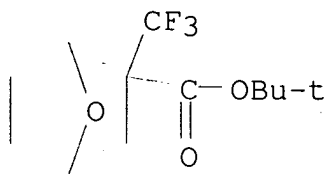
CRN 196314-61-1
 CMF C11 H12 F6 O



RN 782501-31-9 HCAPLUS
 CN 7-Oxabicyclo[2.2.1]heptane-2-carboxylic acid, 5(or
 6)-[[1-oxo-2-(trifluoromethyl)-2-propenyl]oxy]-2-(trifluoromethyl)-
 , 1,1-dimethylethyl ester, polymer with α,α -
 bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA
 INDEX NAME)

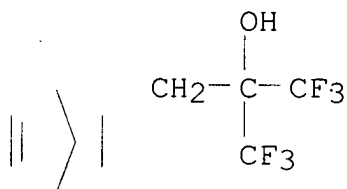
CM 1

CRN 782501-30-8
 CMF C16 H18 F6 O5
 CCI IDS



CM 2

CRN 196314-61-1
 CMF C11 H12 F6 O



IC ICM G03F007-039
 ICS C08F016-26; C08F020-26; H01L021-027
 CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 Section cross-reference(s): 35, 38
 ST pos working resist photoresist resin **photoacid** compn
 IT Polymerization
 (living; pos.-working resist composition containing alkali-soluble
 resin
 and **photoacid**)
 IT Photolithography
 Photoresists
 Resists
 (pos.-working resist composition containing alkali-soluble resin
 and

photoacid)
IT 144317-44-2, Triphenylsulfonium perfluorobutanesulfonate
241806-75-7 338445-29-7 594865-71-1
(**photoacid**; pos.-working resist composition containing
alkali-soluble resin and **photoacid**)
IT 2564-83-2, TEMPO
(pos.-working resist composition containing alkali-soluble resin
and
photoacid)
IT **782501-29-5P 782501-31-9P**
(pos.-working **resist** composition containing alkali-soluble resin
and **photoacid**)

L60 ANSWER 7 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:904405 HCAPLUS
DOCUMENT NUMBER: 141:386379
TITLE: Positive-working resist composition containing
alkali-soluble resins and **photoacids**
INVENTOR(S): Mizutani, Kazuyoshi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 74 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004302197	A2	20041028	JP 2003-95803	2003 0331

PRIORITY APPLN. INFO.: JP 2003-95803
2003
0331

AB Disclosed is the pos.-working resist composition comprising (A) a
resin
having F or trifluoromethyl in the backbone chain and also having
-COQ(CR1aR2aR3a)(R4aR5aR6a) (R1a-6a = F, H, alkyl; and Q =
acid-decomposable group) and -COOQ' (Q' = acid-decomposable group)
and (B) a **photoacid**.

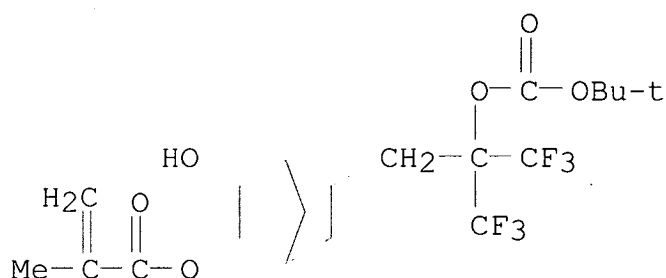
IT **782491-58-1P**
(pos.-working **resist** composition containing alkali-soluble resin
and **photoacid**)
RN 782491-58-1 HCAPLUS
CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-(trifluoromethyl)-,

1,1-dimethylethyl ester, polymer with 5-[2-[[[(1,1-dimethylethoxy)carbonyl]oxy]-3,3,3-trifluoro-2-(trifluoromethyl)propyl]-3-hydroxybicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate and 1,1,2,3,3,3-hexafluoro-1-propene (9CI)
(CA INDEX NAME)

CM 1

CRN 782491-57-0

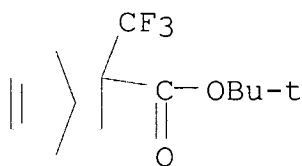
CMF C20 H26 F6 O6



CM 2

CRN 365568-55-4

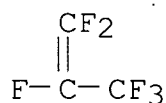
CMF C13 H17 F3 O2



CM 3

CRN 116-15-4

CMF C3 F6



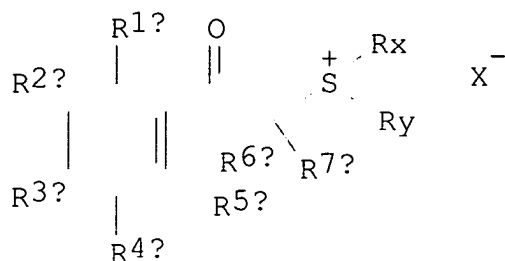
IC ICM G03F007-039
ICS H01L021-027
CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38
IT Photolithography
Photoresists
Resists
(pos.-working resist composition containing alkali-soluble resin
and **photoacid**)
IT 144317-44-2 241806-75-7 338445-29-7 594865-71-1
782491-60-5
(**photoacid**; pos.-working resist composition containing
alkali-soluble resin and **photoacid**)
IT 782491-55-8P 782491-56-9P **782491-58-1P** 782502-60-7P
782502-62-9P
(pos.-working **resist** composition containing alkali-soluble resin
and **photoacid**)

L60 ANSWER 8 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:904404 HCAPLUS
DOCUMENT NUMBER: 141:386378
TITLE: Positive-working resist composition containing
alkali soluble resins and **photoacids**
INVENTOR(S): Sasaki, Tomoya
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 93 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 2004302189	A2	20041028	JP 2003-95605	2003 0331

PRIORITY APPLN. INFO.: JP 2003-95605 2003
0331

GI



I

AB Disclosed is the pos.-working resist composition comprising (a) a resin increasing its solubility to an alkali developer upon an interaction with an acid and (b) a **photoacid**, wherein the resin (a) contains ≥ 1 repeating unit having ≥ 1 group represented by $-\text{C}(\text{OR})(\text{CR}5\text{OR}51\text{R}52)(\text{CR}52\text{R}54\text{R}55)$ ($\text{T}50-55 = \text{H}, \text{F}, \text{alkyl}$; and $\text{R} = \text{H}, \text{acid decomposable or nondecomposable group}$) and the **photoacid** (b) is represented by $\text{R}1\text{bR}2\text{bR}3\text{bS}^+ \text{X}^-$ ($\text{R}1\text{b}-3\text{b} = \text{organic group free of aromatic ring}$; $\text{X}^- = \text{sulfonic acid, carboxylic acid, sulfonylimide}$) or I ($\text{R}1\text{c}-5\text{c} = \text{H, alkyl, alkoxy, etc.}$; $\text{R}6\text{c}-7\text{c} = \text{H, alkyl, aryl}$; $\text{Rx, Ry} = \text{alkyl, 2-oxoalkyl, etc.}$). The composition was suitable for a light source having a wavelength $\leq 160 \text{ nm}$.

IT **782482-74-0P 782482-76-2P 782482-85-3P**
782482-88-6P

(pos.-working **resist** composition containing alkali soluble resin and **photoacid**)

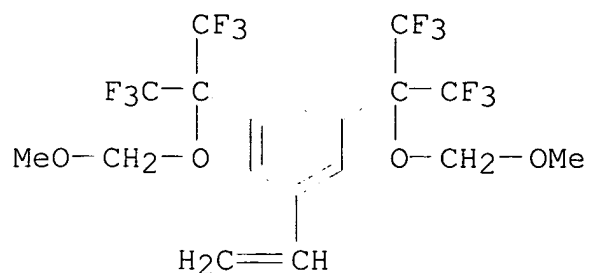
RN 782482-74-0 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, methyl ester, polymer with α, α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol and 1-ethenyl-3,5-bis[2,2,2-trifluoro-1-(methoxymethoxy)-1-(trifluoromethyl)ethyl]benzene (9CI) (CA INDEX NAME)

CM 1

CRN 585573-59-7

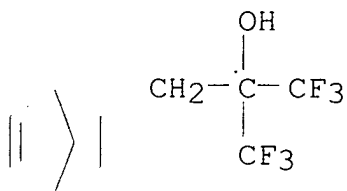
CMF C18 H16 F12 O4



CM 2

CRN 196314-61-1

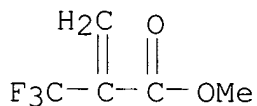
CMF C11 H12 F6 O



CM 3

CRN 382-90-1

CMF C5 H5 F3 O2

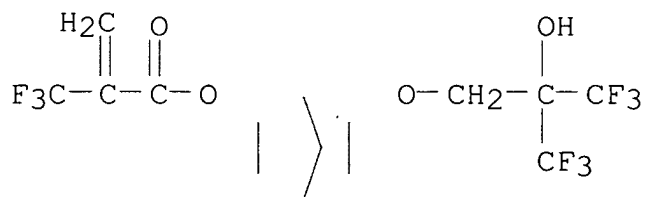


RN 782482-76-2 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-(trifluoromethyl)-, methyl ester, polymer with 1-ethenyl-3,5-bis[1-(ethoxymethoxy)-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]benzene and 6-[3,3,3-trifluoro-2-hydroxy-2-(trifluoromethyl)propoxy]bicyclo[2.2.1]hept-2-yl 2-(trifluoromethyl)-2-propenoate (9CI) (CA INDEX NAME)

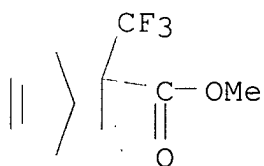
CM 1

CRN 782482-75-1
CMF C15 H15 F9 O4



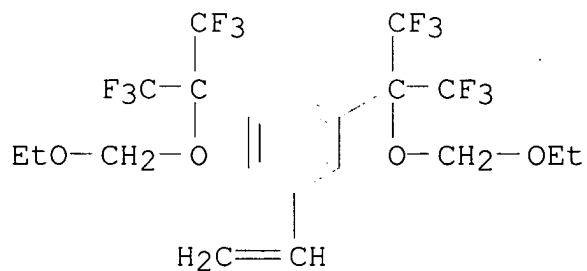
CM 2

CRN 597581-42-5
CMF C10 H11 F3 O2



CM 3

CRN 585573-40-6
CMF C20 H20 F12 O4



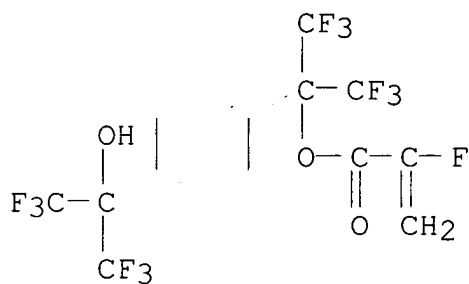
RN 782482-85-3 HCAPLUS
CN 2-Propenoic acid, 2-fluoro-, 2,2,2-trifluoro-1-[4-[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]cyclohexyl]-1-(trifluoromethyl)ethyl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol and

1-ethenyl-3,5-bis[2,2,2-trifluoro-1-(methoxymethoxy)-1-(trifluoromethyl)ethyl]benzene (9CI) (CA INDEX NAME)

CM 1

CRN 635683-21-5

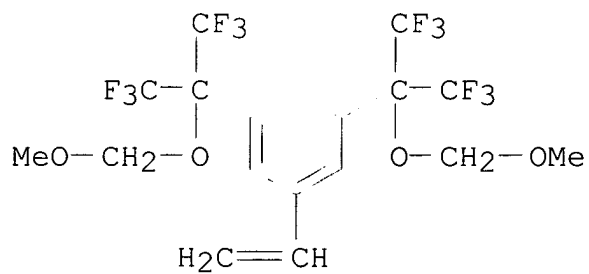
CMF C15 H13 F13 O3



CM 2

CRN 585573-59-7

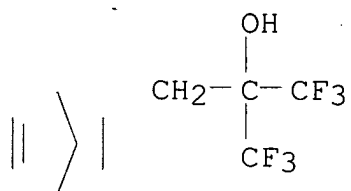
CMF C18 H16 F12 O4



CM 3

CRN 196314-61-1

CMF C11 H12 F6 O



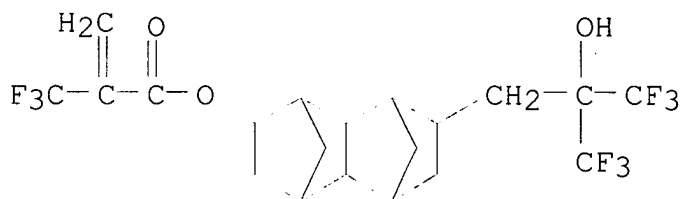
RN 782482-88-6 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, decahydro[7-[3,3,3-trifluoro-2-hydroxy-2-(trifluoromethyl)propyl]-1,4:5,8-dimethanonaphthalen-2-yl] ester, polymer with 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-(trifluoromethyl)-2-propenoate and $\alpha, \alpha, \alpha', \alpha'$ -tetrakis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2,3-diethanol (9CI) (CA INDEX NAME)

CM 1

CRN 782482-87-5

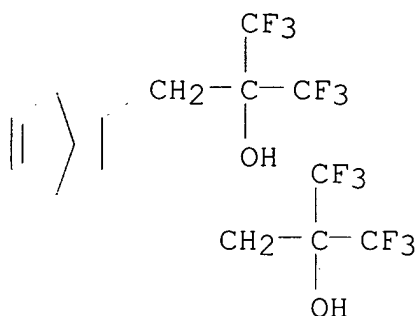
CMF C20 H21 F9 O3



CM 2

CRN 782482-86-4

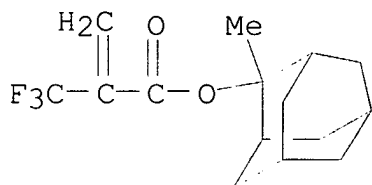
CMF C15 H14 F12 O2



CM 3

CRN 188739-86-8

CMF C15 H19 F3 O2



IC ICM G03F007-039

ICS G03F007-004; H01L021-027

CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 Section cross-reference(s): 35, 38

IT Photolithography

Photoresists

Resists

(pos.-working resist composition containing alkali soluble resin

and

photoacid)

IT 160481-39-0 301664-71-1 347193-29-7 454471-17-1
 540729-47-3

(photoacid; pos.-working resist composition containing alkali soluble resin and **photoacid**)

IT **782482-74-0P 782482-76-2P 782482-78-4P**
782482-79-5P 782482-82-0P 782482-84-2P 782482-85-3P
782482-88-6P 782482-91-1P

(pos.-working **resist** composition containing alkali soluble resin and **photoacid**)

IT 98-59-9, p-Toluenesulfonic acid chloride 107-30-2,

Chloromethyl-methyl ether 802-93-7, 1,3-Bis(2-hydroxyhexafluoroisopropyl)benzene 3536-96-7, Vinyl magnesium chloride

(pos.-working resist composition containing alkali soluble resin and **photoacid**)

IT 501935-24-6P 568587-26-8P 585573-34-8P 585573-35-9P
585573-59-7P

(pos.-working resist composition containing alkali soluble resin and **photoacid**)

L60 ANSWER 9 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:820201 HCAPLUS

DOCUMENT NUMBER: 141:340381

TITLE: Chemically amplified photoresist composition containing specific **photoacid** generator and specific fluoro polymers

INVENTOR(S): Kanna, Shinichi; Kodama, Kunihiro; Takahashi, Omote

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 67 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004279667	A2	20041007	JP 2003-70104	2003 0314

PRIORITY APPLN. INFO.:

JP 2003-70104

2003
0314

AB The title composition contains a fluoro resin increasing the alkali-solubility by an acid and a **photoacid** generator, wherein the **photoacid** generator satisfies the equation: $-1.5 < E_{pc} < -0.5$ where $E_{pc}(V)$ is the half wave of the reduction voltage. The composition is suitable for exposure light of ≤ 160 nm such as F2 excimer laser.

IT **769939-58-4P**

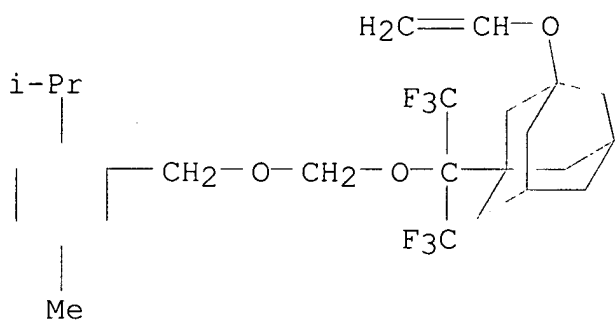
(resin; chemical amplified **photoresist** composition)

RN 769939-58-4 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 3,5-

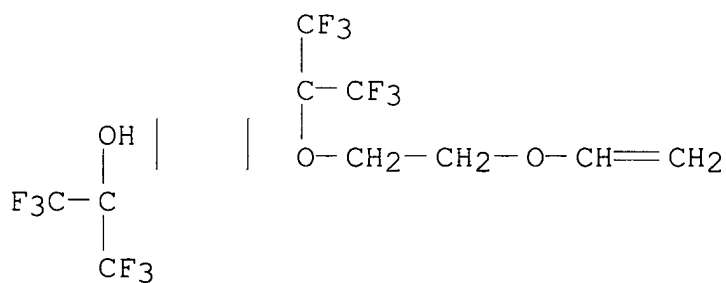
CM 1

CMF C27 H40 F6 O3



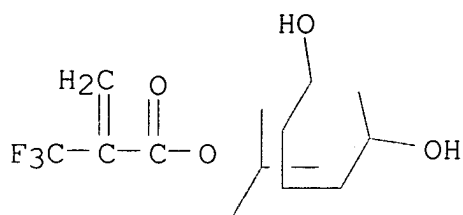
CM 2

CMF C16 H18 F12 O3



CM 3

CMF C14 H17 F3 O4



IC ICM G03F007-039
 ICS G03F007-004; H01L021-027
 CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 Section cross-reference(s): 37
 ST amplified photoresist compn **photoacid** generator fluoro
 polymer
 IT 160481-39-0P 301664-71-1P 769939-59-5P
 (**photoacid**; chemical amplified photoresist composition)
 IT 643024-70-8P 769939-55-1P 769939-56-2P **769939-58-4P**
 769949-25-9P
 (resin; chemical amplified **photoresist** composition)

L60 ANSWER 10 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:801637 HCAPLUS
 DOCUMENT NUMBER: 141:322566
 TITLE: Positive-working photoresist composition for
 157 nm photolithography
 INVENTOR(S): Mizutani, Kazuyoshi
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 72 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004271844	A2	20040930	JP 2003-61749	2003 0307
PRIORITY APPLN. INFO.:				2003 0307

AB The title pos. working photoresist composition comprises an alkaline
 developable fluoropolymer containing a group $-\text{C}(\text{CR}_1\text{R}_2\text{R}_3)(\text{CR}_4\text{R}_5\text{R}_6)\text{OH}$

[R1-6 = F, H, alkyl], an alkaline developable fluoropolymer containing a group(s) -C(CR1R2R3)(CR4R5R6)OQ and/or -CO2Q' [R1-6 = F, H, alkyl; Q, Q' = group capable of decomposing upon acid action], an alkaline developable fluoro compound, and a **photoacid** generator. The photoresist composition shows improved line-edge roughness and developability.

IT **370866-39-0P 765915-76-2P 765915-79-5P**
765915-80-8P 765915-85-3P

(alkaline developable fluoropolymer; pos.-working
photoresist composition for 157 nm photolithog.)

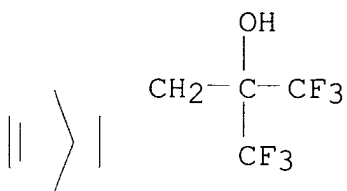
RN 370866-39-0 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester,
 polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 196314-61-1

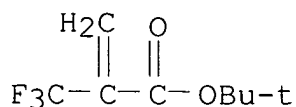
CMF C11 H12 F6 O



CM 2

CRN 105935-24-8

CMF C8 H11 F3 O2

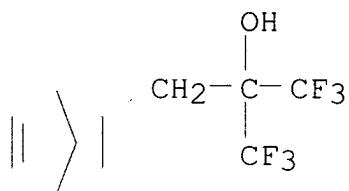


RN 765915-76-2 HCAPLUS

CN 2-Propenoic acid, 2-fluoro-, methyl ester, polymer with
 α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol and tetrafluoroethene (9CI) (CA INDEX NAME)

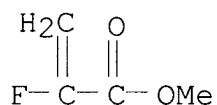
CM 1

CRN 196314-61-1
CMF C11 H12 F6 O



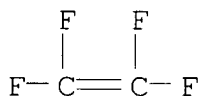
CM 2

CRN 2343-89-7
CMF C4 H5 F O2



CM 3

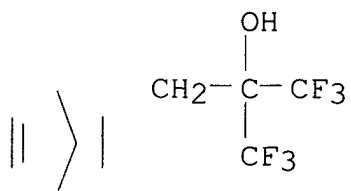
CRN 116-14-3
CMF C2 F4



RN 765915-79-5 HCAPLUS
CN 2-Propenoic acid, 2-(trifluoromethyl)-, methyl ester, polymer with
 α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-
ethanol (9CI) (CA INDEX NAME)

CM 1

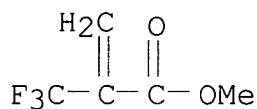
CRN 196314-61-1
CMF C11 H12 F6 O



CM 2

CRN 382-90-1

CMF C5 H5 F3 O2



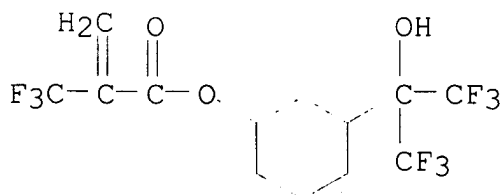
RN 765915-80-8 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 3-[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]cyclohexyl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 732299-61-5

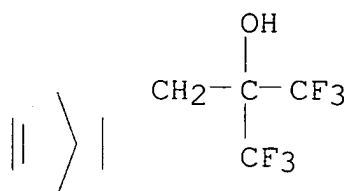
CMF C13 H13 F9 O3



CM 2

CRN 196314-61-1

CMF C11 H12 F6 O



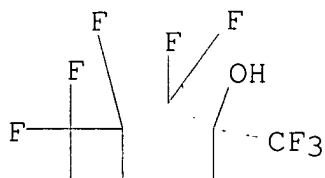
RN 765915-85-3 HCAPLUS

CN 2-Propenoic acid, 1,1-dimethylpropyl ester, polymer with
2-hydroxyethyl 2-propenoate and 1,2,2,7,7-pentafluoro-3-
(trifluoromethyl)bicyclo[3.2.0]heptan-3-ol (9CI) (CA INDEX NAME)

CM 1

CRN 637035-70-2

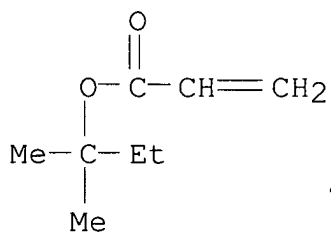
CMF C8 H6 F8 O



CM 2

CRN 7383-26-8

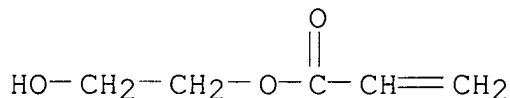
CMF C8 H14 O2



CM 3

CRN 818-61-1

CMF C5 H8 O3



IC ICM G03F007-039
ICS C08F212-14; C08F216-04; C08F216-14; C08F220-00; C08F232-04;
C08F232-08; G03F007-004; H01L021-027
CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 262617-10-7P **370866-39-0P** 637035-70-2P
765915-76-2P 765915-77-3P 765915-78-4P
765915-79-5P 765915-80-8P 765915-82-0P
765915-83-1P 765915-84-2P **765915-85-3P** 765915-86-4P
765915-87-5P 765942-17-4P
(alkaline developable fluoropolymer; pos.-working
photoresist composition for 157 nm photolithog.)
IT 144317-44-2, Triphenylsulfonium nonaflate
(**photoacid** generator; pos.-working photoresist composition
for 157 nm photolithog.)

L60 ANSWER 11 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STM
ACCESSION NUMBER: 2004:512397 HCAPLUS
DOCUMENT NUMBER: 141:79307
TITLE: Fluorine-containing alicyclic unsaturated
compounds, their polymers, chemically
amplified resists, and pattern formation
INVENTOR(S): Maeda, Katsumi; Nakano, Kaichiro
PATENT ASSIGNEE(S): NEC Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2004175721	A2	20040624	JP 2002-343843	2002 1127

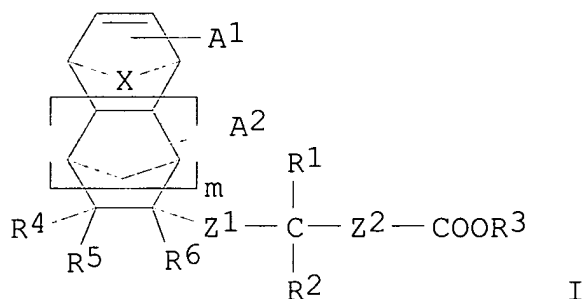
PRIORITY APPLN. INFO.:

JP 2002-343843

2002

1127

OTHER SOURCE(S): MARPAT 141:79307
GI



AB The compds. are I [$R_1, R_2 = H, F, C_1-6$ (cyclo)alkyl, fluoroalkyl; R_1 and/or $R_2 = F$ or fluoroalkyl; $R_3 = H, F, C_1-10$ (cyclo)alkyl, fluoroalkyl, acid-labile group; $R_4-R_6 = H, F, C_1-6$ (cyclo)alkyl, fluoroalkyl, OH, CH_2OH ; $Z_1 = O, CH_2O$; $Z_2 = C_1-6$ alkylene, fluoroalkylene; $A_1, A_2 = H, Me$; $X = CH_2, CH_2CH_2, O$; $m = 0, 1$]. The resists containing the polymers and **photoacid** generators are exposed to light at 130-190 nm, preferably F2 excimer laser, and developed. The resists show good far-UV transparency and dry etching resistance.

IT **709655-69-6P**
(F-containing alicyclic unsatd. compds. for chemical amplified **resists** showing dry etching **resistance** for far-UV lithog.)

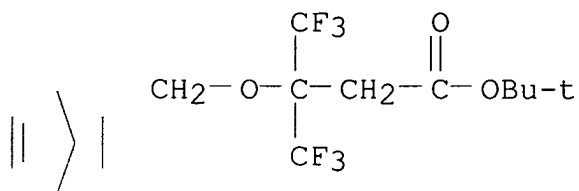
RN 709655-69-6 HCAPLUS

CN Butanoic acid, 3-(bicyclo[2.2.1]hept-5-en-2-ylmethoxy)-4,4,4-trifluoro-3-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with α, α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol and methyl 2-(trifluoromethyl)-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 709655-62-9

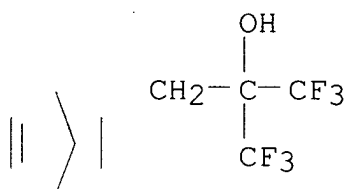
CMF C17 H22 F6 O3



CM 2

CRN 196314-61-1

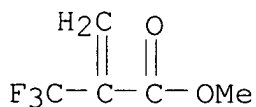
CMF C11 H12 F6 O



CM 3

CRN 382-90-1

CMF C5 H5 F3 O2

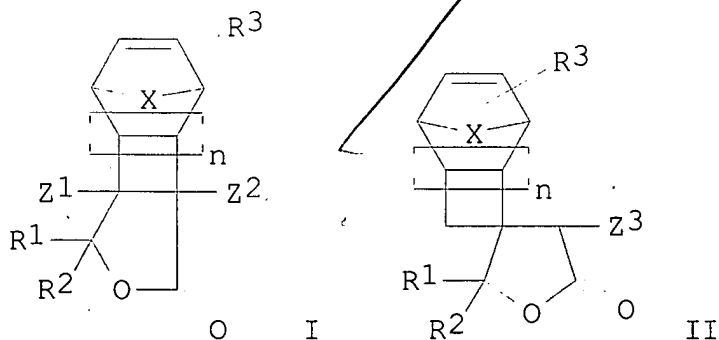


IC ICM C07C059-62

ICS C07C069-734; C08F032-00; C08F034-00; C08G061-00; G03F007-039;
H01L021-027CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
Section cross-reference(s): 24, 35, 38IT 709655-66-3P 709655-67-4P 709655-68-5P **709655-69-6P**
709655-70-9P 709655-72-1P(F-containing alicyclic unsatd. compds. for chemical amplified
resists showing dry etching **resistance** for
far-UV lithog.)

L60 ANSWER 12 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:472366 HCAPLUS
 DOCUMENT NUMBER: 141:44850
 TITLE: Unsaturated monomers bearing
 fluorine-containing bridged alicyclic lactone
 structures, their polymers, and chemically
 amplified resists and pattern formation using
 them
 INVENTOR(S): Maeda, Katsumi; Nakano, Kaichiro
 PATENT ASSIGNEE(S): NEC Corp., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 36 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004161827	A2	20040610	JP 2002-327075	2002 1111
PRIORITY APPLN. INFO.:				JP 2002-327075 2002 1111
OTHER SOURCE(S):		MARPAT 141:44850		
GI				



AB The polymers are obtained from monomers containing I (R1,2 = H, C1-6 alkyl, C4-6 alkylene forming ring together; R3 = H, Me; Z1,2 = H,

C1-6 alkyl, F, fluorinated alkyl, CR4R5OR6; R4,5 = C1-4 alkyl, fluorinated alkyl; R4 = R5 ≠ alkyl; R6 = OH, C1-6 alkyl, acid-labile group; X = CH₂, CH₂CH₂, O; n 0, 1) and/or II (Z3 = F, fluorinated alkyl, CR4R5OR6; R1-6, X, n = same as above). The resists containing the polymers and **photoacid** generators show good transparency to F2 excimer laser, adhesion to substrates, and dry etching resistance.

IT **701294-47-5P 701294-48-6P**

(chemical amplified **photoresists** for F2 excimer laser exposure containing polymers from F-containing bridged alicyclic lactone monomers)

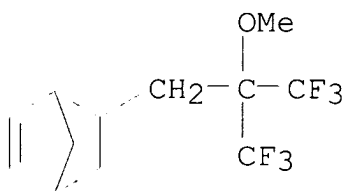
RN 701294-47-5 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with α,α-bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol and 5-[3,3,3-trifluoro-2-methoxy-2-(trifluoromethyl)propyl]bicyclo[2.2.1]hept-2-ene (9CI) (CA INDEX NAME)

CM 1

CRN 701294-46-4

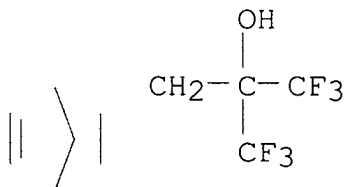
CMF C12 H14 F6 O



CM 2

CRN 196314-61-1

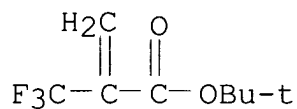
CMF C11 H12 F6 O



CM 3

CRN 105935-24-8

CMF C8 H11 F3 O2



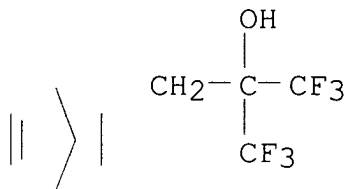
RN 701294-48-6 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylethyl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol and 1,1-dimethylethyl 2-(trifluoromethyl)-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 196314-61-1

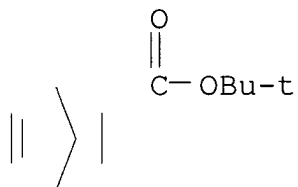
CMF C11 H12 F6 O



CM 2

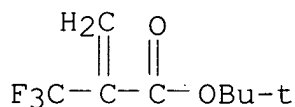
CRN 154970-45-3

CMF C12 H18 O2



CM 3

CRN 105935-24-8
CMF C8 H11 F3 O2



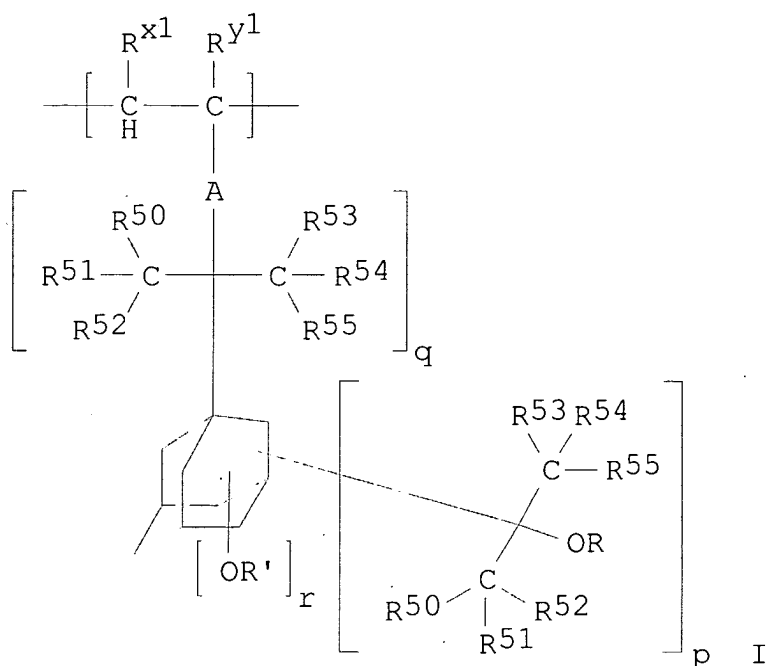
IC ICM C08F034-00
ICS C07D307-93; C07D307-94; C08G061-08; G03F007-039; H01L021-027
CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
Section cross-reference(s): 24, 35, 38
IT 701294-42-0P 701294-43-1P **701294-47-5P**
701294-48-6P
(chemical amplified **photoresists** for F2 excimer laser
exposure containing polymers from F-containing bridged alicyclic
lactone monomers)
IT 144317-44-2, Triphenylsulfonium nonaflate
(**photoacid** generator; chemical amplified photoresists
for F2 excimer laser exposure containing polymers from F-containing
bridged alicyclic lactone monomers)

L60 ANSWER 13 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:447253 HCAPLUS
DOCUMENT NUMBER: 141:31078
TITLE: Positive-working resists with good F2 excimer
laser transparency
INVENTOR(S): Kanna, Shinichi; Mizutani, Kazuyoshi; Sasaki,
Tomoya
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 77 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004157321	A2	20040603	JP 2002-322832	2002 1106
PRIORITY APPLN. INFO.:				JP 2002-322832 2002

1106

GI



AB The resists contain resins having structural repeating units I
 (R^{x1} , R^{y1} = H, halo, cyano, alkyl; R_{50} - R_{55} = H, F, alkyl;
 ≥ 1 of R_{50} - R_{55} = F or fluoroalkyl; R , R' = H, organic group; A
 = O, OR600; R_{60} = alkylene; $p = 0-3$; p , $r = 0, 1$; $p + q \geq 1$)
 and increasing solubility in aqueous alkaline solns. by treatment
 with acids,

photoacid generators, and solvents. The resists suppress
 development defects.

IT **697751-87-4P**

(pos.-working **resists** containing polymers bearing
 adamantyl groups and showing good F2 excimer laser
 transparency)

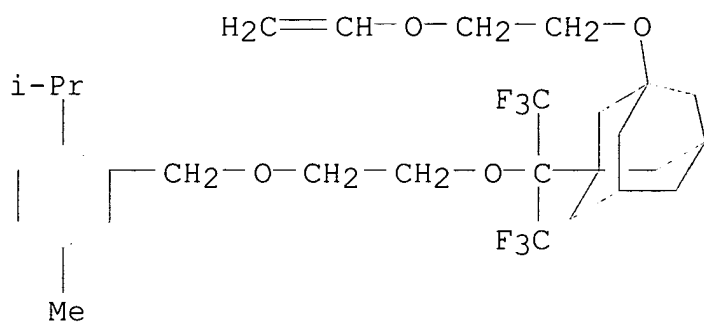
RN 697751-87-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 5(or 6)-[3,3,3-trifluoro-2-hydroxy-2-
 (trifluoromethyl)propyl]bicyclo[2.2.1]hept-2-yl ester, polymer
 with 1-[2-(ethenyloxy)ethoxy]-3-[2,2,2-trifluoro-1-[2-[[5-methyl-2-
 (1-methylethyl)cyclohexyl]methoxy]ethoxy]-1-
 (trifluoromethyl)ethyl]tricyclo[3.3.1.1^{3,7}]decane (9CI) (CA INDEX
 NAME)

CM 1

CRN 697748-27-9

CMF C30 H46 F6 O4

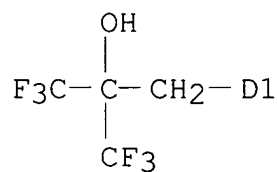
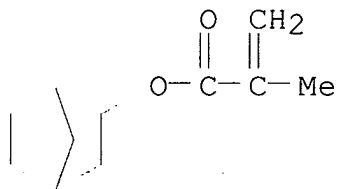


CM 2

CRN 585578-37-6

CMF C15 H18 F6 O3

CCI IDS



IC ICM G03F007-039

ICS C08F016-26; H01L021-027

CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 Section cross-reference(s): 38

IT 697748-24-6P 697748-26-8P 697748-28-0P 697748-30-4P

697748-32-6P 697748-34-8P 697751-86-3P **697751-87-4P**

(pos.-working **resists** containing polymers bearing
adamantyl groups and showing good F2 excimer laser
transparency)

L60 ANSWER 14 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:427802 HCAPLUS

DOCUMENT NUMBER: 140:431402

TITLE: Indene-based polymers, their positive
photoresists with high resolution,
sensitivity, suppressed edge roughness, and
good etching resistance, and photolithography
using them

INVENTOR(S): Hatakeyama, Jun; Kaneo, Takeshi; Hasegawa,
Koji; Watanabe, Takeshi; Watanabe, Osamu;
Takeda, Takanobu

PATENT ASSIGNEE(S): Shin-Etsu Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 58 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2004149754	A2	20040527	JP 2003-20843	2003 0129
PRIORITY APPLN. INFO.:			JP 2002-258206	A 2002 0903

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT

*

AB The invention relates to polymers with Mw 1000-500,000 comprising
repeating units I (R1 = H, acid-unstable group; X = O, S, NR2; R2
= H, OH, CH2OH, C1-10-alkyl, R3CO2R4, etc.; R3 = single bond,
C1-6-alkylene; R4, R20 = acid-unstable group; R21 = H, Me; Rf1,
Rf2 = H, F, CF3; q ≥ 0; m = 1-4 when q = 0; m = 0-4 when q
> 0; p = 0, 1; a = 0.1-0.9; b1, b2 = 0-0.9; 0 < a + b1 + b2 + q

≤ 1 ; $0 < b_1 + b_2 \leq 0.9$) or II ($R_1, R_{20}, R_{21}, m, p, q$ = same as above; $a, c > 0$; $0 < a + c + q \leq 1$; $Y_1-4 = H, F, Cl, Br, \text{cyano}, \text{alkoxycarbonyl}, \text{alkoxy}, OH, \text{sulfonyl}, \text{etc.}$; $Y_1 = Y_2 = Y_3 = Y_4 \neq H$). The photoresist compns. may contain **photoacid** generators, bases, surfactants, and dissoln. inhibitors.

IT **691879-90-0P 691880-00-9P**

(indene polymers for pos. **photoresists** with high resolution, sensitivity, suppressed edge roughness, and good etching **resistance**)

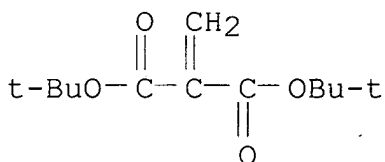
RN 691879-90-0 HCAPLUS

CN Propanedioic acid, methylene-, bis(1,1-dimethylethyl) ester, polymer with 1H-inden-7-ol (9CI) (CA INDEX NAME)

CM 1

CRN 86633-09-2

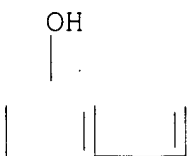
CMF C12 H20 O4



CM 2

CRN 2059-92-9

CMF C9 H8 O

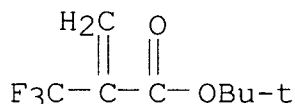


RN 691880-00-9 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with 1H-inden-6-ol (9CI) (CA INDEX NAME)

CM 1

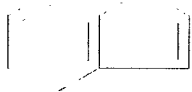
CRN 105935-24-8
CMF C8 H11 F3 O2



CM 2

CRN 1195-04-6
CMF C9 H8 O

HO



IC ICM C08F232-08
ICS C08F222-06; C08F222-40; C08F224-00; C08F234-04; G03F007-039;
H01L021-027

CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

IT 691879-88-6P, 7-tert-Butoxyindene-maleic anhydride copolymer
691879-89-7P **691879-90-0P** 691879-91-1P 691879-92-2P
691879-93-3P 691879-94-4P 691879-95-5P 691879-97-7P
691879-98-8P 691879-99-9P **691880-00-9P**

(indene polymers for pos. **photoresists** with high
resolution, sensitivity, suppressed edge roughness, and good
etching **resistance**)

IT 194999-85-4 258342-00-6
(**photoacid** generator; indene polymers for pos.
photoresists with high resolution, sensitivity, suppressed edge
roughness, and good etching resistance)

L60 ANSWER 15 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:326237 HCAPLUS

DOCUMENT NUMBER: 140:347511

TITLE: Photoresists with hydroxylated,
photoacid-cleavable groups

INVENTOR(S): Farnham, William Brown; Feiring, Andrew L.;
Schadt, Frank L., III; Qiu, Weiming

PATENT ASSIGNEE(S): E.I. Du Pont de Nemours and Company, USA

SOURCE: Eur. Pat. Appl., 25 pp.
CODEN: EPXXDW
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1411389	A1	20040421	EP 2003-256267	2003 1003

<--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,
EE, HU, SK

US 2004126697	A1	20040701	US 2003- <u>669492</u>	2003 0924
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JP 2004280049	A2	20041007	JP 2003-346258	2003 1003
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PRIORITY APPLN. INFO.: US 2002-415855P P
2002
1003

<--
AB The present invention pertains to photoimaging and the use of photoresists (pos.-working and/or neg.-working) for imaging in the production of semiconductor devices. The present invention also pertains to novel hydroxy ester-containing polymer compns. that are useful as base resins in resists and potentially in many other applications.

IT **680975-27-3P 680975-29-5P 680975-30-8P**

(preparation of **photoresists** with **hydroxylated, photoacid-cleavable** groups)

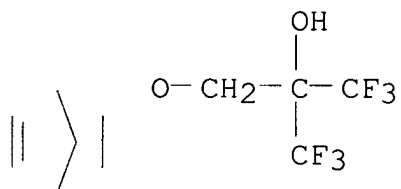
RN 680975-27-3 HCAPLUS

CN 2-Propenoic acid, 2-hydroxy-1,1,2-trimethylpropyl ester, polymer with 2-[(bicyclo[2.2.1]hept-5-en-2-yloxy)methyl]-1,1,1,3,3,3-hexafluoro-2-propanol and tetrafluoroethene (9CI) (CA INDEX NAME)

CM 1

CRN 305815-63-8

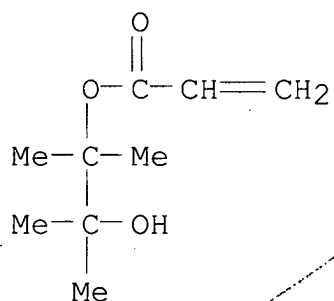
CMF C11 H12 F6 O2



CM 2

CRN 97325-36-5

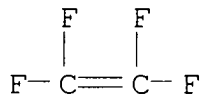
CMF C9 H16 O3



CM 3

CRN 116-14-3

CMF C2 F4



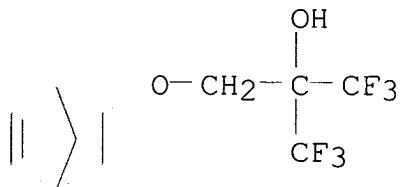
RN 680975-29-5 HCAPLUS

CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with
 2-[(bicyclo[2.2.1]hept-5-en-2-yloxy)methyl]-1,1,1,3,3,3-hexafluoro-
 2-propanol, 2-hydroxy-1,1,2-trimethylpropyl 2-propenoate and
 tetrafluoroethene (9CI) (CA INDEX NAME)

CM 1

CRN 305815-63-8

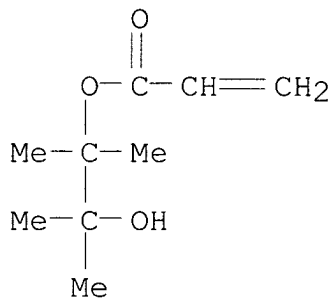
CMF C11 H12 F6 O2



CM 2

CRN 97325-36-5

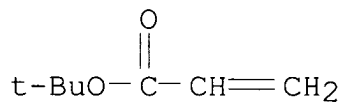
CMF C9 H16 O3



CM 3

CRN 1663-39-4

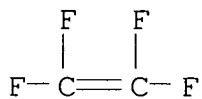
CMF C7 H12 O2



CM 4

CRN 116-14-3

CMF C2 F4



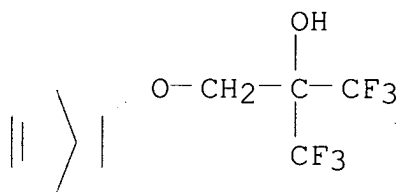
RN 680975-30-8 HCAPLUS

CN 2-Propenoic acid, 2-hydroxy-1,1,2-trimethylpropyl ester, polymer with 2-[(bicyclo[2.2.1]hept-5-en-2-yloxy)methyl]-1,1,1,3,3,3-hexafluoro-2-propanol, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-propenoate and tetrafluoroethene (9CI) (CA INDEX NAME)

CM 1

CRN 305815-63-8

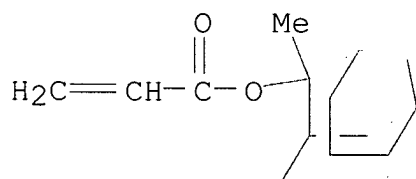
CMF C11 H12 F6 O2



CM 2

CRN 249562-06-9

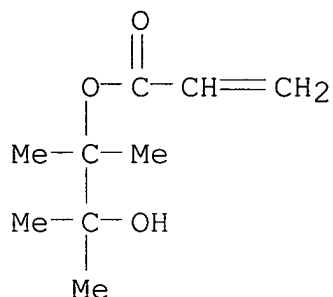
CMF C14 H20 O2



CM 3

CRN 97325-36-5

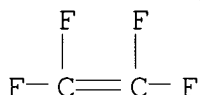
CMF C9 H16 O3



CM 4

CRN 116-14-3

CMF C2 F4



IC ICM G03F007-039

ICS G03F007-004

CC **74-5** (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 Section cross-reference(s): 35, 38

ST photoresist hydroxylated **photoacid** semiconductor device

IT Photoresists

(photoresists with hydroxylated, **photoacid**-cleavable
 groups)

IT Semiconductor device fabrication

(photoresists with hydroxylated, **photoacid**-cleavable
 groups for)

IT 97325-36-5P

(preparation of photoresists with hydroxylated, **photoacid**
 -cleavable groups)

IT **680975-27-3P 680975-29-5P 680975-30-8P**

(preparation of **photoresists** with hydroxylated,
photoacid-cleavable groups)

IT 76-09-5, Pinacol 814-68-6, Acryloyl chloride

(preparation of photoresists with hydroxylated, **photoacid**
 -cleavable groups)

REFERENCE COUNT:

2

THERE ARE 2 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L60 ANSWER 16 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:250275 HCAPLUS
 DOCUMENT NUMBER: 140:278429
 TITLE: Positive photoresist compositions for F2
 excimer lasers with good heat resistance and
 suppressed line edge roughness
 INVENTOR(S): Mizutani, Kazuyoshi
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 61 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2004093768	A2	20040325	JP 2002-253255	2002 0830
PRIORITY APPLN. INFO.:			JP 2002-253255	2002 0830

AB The compns. comprise (A) **photoacid** generators and (B)
 resins increasing their alkali solubility by acid decomposition,
 wherein the
 resins have crosslinked repeating units CRaRbCRc(OLOCRC'CRa'Rb')
 (Ra, Rb, Rc, Ra', Rb', Rc' = H, F, fluoroalkyl; L = linking
 group).

IT **674777-92-5P 674781-14-7P**

(pos. **photoresists** for F2 excimer lasers with good
 heat **resistance** and suppressed line edge roughness)

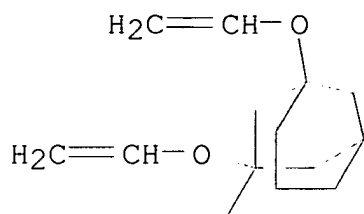
RN 674777-92-5 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2-
 methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with
 1,3-bis(ethenyloxy)tricyclo[3.3.1.1^{3,7}]decane and
 α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-
 ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 406226-15-1

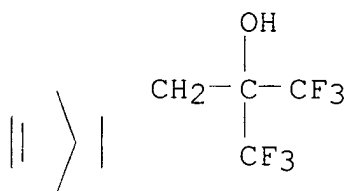
CMF C14 H20 O2



CM 2

CRN 196314-61-1

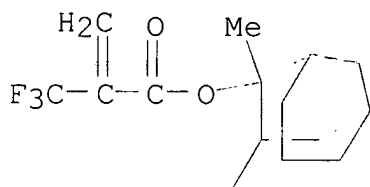
CMF C11 H12 F6 O



CM 3

CRN 188739-86-8

CMF C15 H19 F3 O2

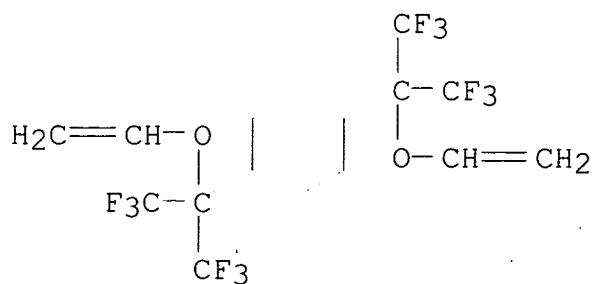


RN 674781-14-7 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with 1,4-bis[1-(ethenyloxy)-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]cyclohexane and α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

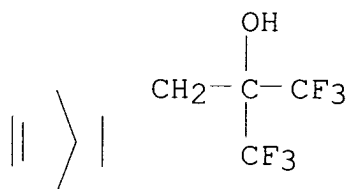
CM 1

CRN 674781-13-6
CMF C16 H16 F12 O2



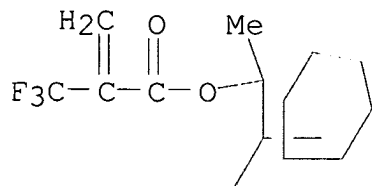
CM 2

CRN 196314-61-1
CMF C11 H12 F6 O



CM 3

CRN 188739-86-8
CMF C15 H19 F3 O2



IC ICM G03F007-039
ICS C08F016-32; H01L021-027
CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)

IT 1511-10-0 66003-78-9 205682-99-1 241806-75-7 338445-29-7
594865-71-1

(**photoacid** generator; pos. photoresists for F2
excimer lasers with good heat resistance and suppressed line
edge roughness)

IT **674777-92-5P 674781-14-7P**

(pos. **photoresists** for F2 excimer lasers with good
heat **resistance** and suppressed line edge roughness)

L60 ANSWER 17 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:250257 HCAPLUS

DOCUMENT NUMBER: 140:294777

TITLE: Positive photoresist compositions for F2
excimer lasers with good heat resistance and
suppressed line edge roughness

INVENTOR(S): Mizutani, Kazuyoshi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 61 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2004093690	A2	20040325	JP 2002-251870	

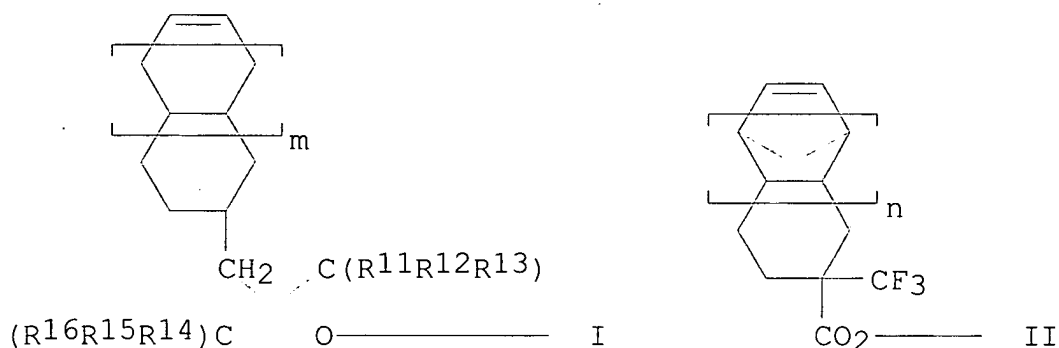
2002
0829

PRIORITY APPLN. INFO.:

JP 2002-251870

2002
0829

GI



AB The compns. comprise (A) **photoacid** generators and (B) resins increasing their alkali solubility by acid decomposition, wherein the

resins have ≥ 1 repeating units derived from monomers having ≥ 2 residual groups selected from I (R11-16 = H, F, fluoroalkyl; R11 = R12 = R13 = R14 = R15 = R16 \neq H; m = 0, 1) and II (n = same as m).

IT **674777-91-4P 674777-92-5P**

(pos. **photoresists** for F2 excimer lasers with good heat **resistance** and suppressed line edge roughness)

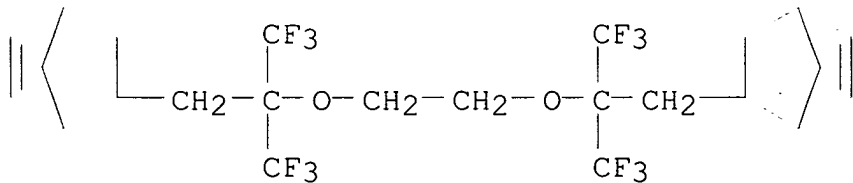
RN 674777-91-4 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with α, α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol and 5,5'-[1,2-ethanediylbis[oxy[2,2-bis(trifluoromethyl)-2,1-ethanediyl]]]bis[bicyclo[2.2.1]hept-2-ene] (9CI) (CA INDEX NAME)

CM 1

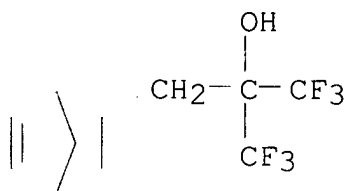
CRN 674777-90-3

CMF C24 H26 F12 O2



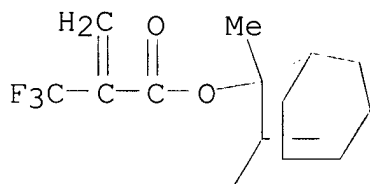
CM 2

CRN 196314-61-1
CMF C11 H12 F6 O



CM 3

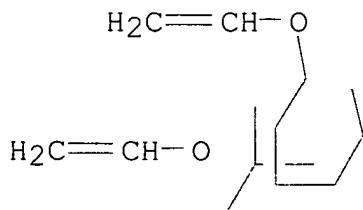
CRN 188739-86-8
CMF C15 H19 F3 O2



RN 674777-92-5 HCAPLUS
CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with 1,3-bis(ethenyloxy)tricyclo[3.3.1.1^{3,7}]decane and α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

CM 1

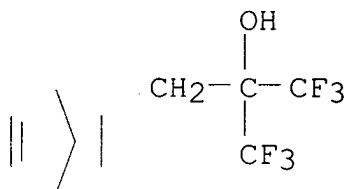
CRN 406226-15-1
CMF C14 H20 O2



CM 2

CRN 196314-61-1

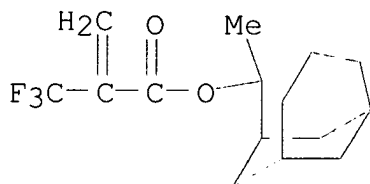
CMF C11 H12 F6 O



CM 3

CRN 188739-86-8

CMF C15 H19 F3 O2



IC ICM G03F007-039

ICS C08F232-00; H01L021-027

CC 74-5 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)IT 1511-10-0 144317-44-2 205682-99-1 241806-75-7 338445-29-7
594865-71-1(photoacid generator; pos. photoresists for F2
excimer lasers with good heat resistance and suppressed line
edge roughness)

IT 674777-91-4P 674777-92-5P

(pos. photoresists for F2 excimer lasers with good
heat **resistance** and suppressed line edge roughness)

L60 ANSWER 18 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:200889 HCAPLUS

DOCUMENT NUMBER: 140:261395

TITLE: Positive-working photoresist composition

INVENTOR(S): Sasaki, Tomoya; Mizutani, Kazuyoshi; Kanna, Shinichi
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 93 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004077983	A2	20040311	JP 2002-240660	2002 0821
PRIORITY APPLN. INFO.: JP 2002-240660				2002 0821

AB The title photoresist composition comprises an alkaline developable resin

having a structural repeating unit -C(CR50R51R52)(CR53R54R55)ORx [R50-55 = H, F, fluoroalkyl, alkyl; Rx = cleaving group upon reaction with acid], and an acid generator.

IT **670228-17-8P 670228-26-9P**

(preparation of alkaline developable resin for pos.-working photoresist composition suitable for semiconductor device fabrication with 157 nm laser)

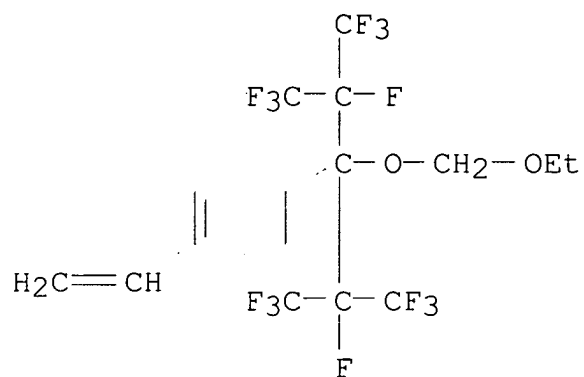
RN 670228-17-8 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with 4-ethenyl- α,α -bis[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]benzenemethanol and 1-ethenyl-4-[1-(ethoxymethoxy)-2,3,3,3-tetrafluoro-1-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-2-(trifluoromethyl)propyl]benzene (9CI) (CA INDEX NAME)

CM 1

CRN 670228-16-7

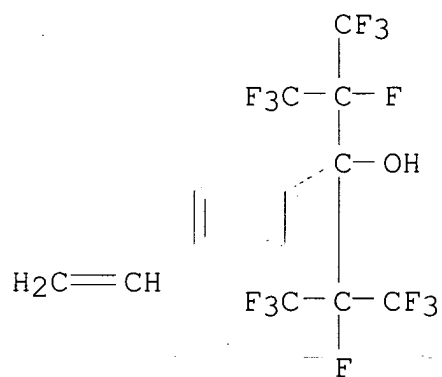
CMF C18 H14 F14 O2



CM 2

CRN 670228-07-6

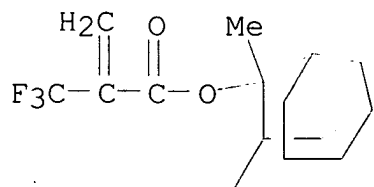
CMF C15 H8 F14 O



CM 3

CRN 188739-86-8

CMF C15 H19 F3 O2



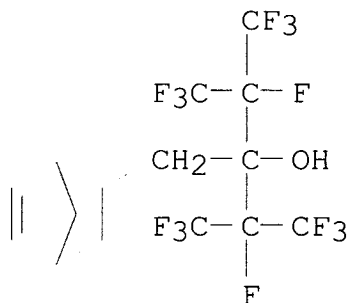
RN 670228-26-9 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with α, α -bis[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]bicyclo[2.2.1]hept-5-ene-2-ethanol and 1-ethenyl-4-[1-(ethoxymethoxy)-2,3,3,3-tetrafluoro-1-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-2-(trifluoromethyl)propyl]benzene (9CI) (CA INDEX NAME)

CM 1

CRN 670228-25-8

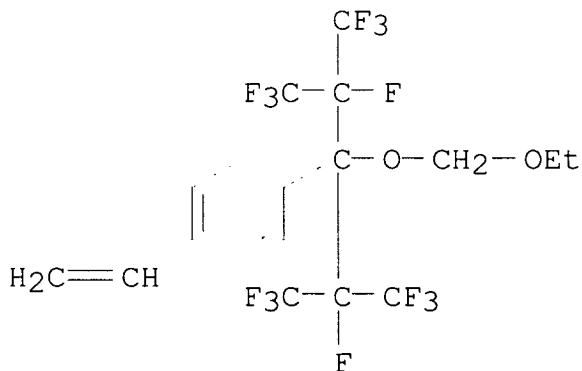
CMF C15 H12 F14 O



CM 2

CRN 670228-16-7

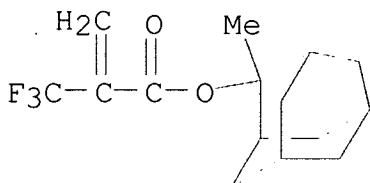
CMF C18 H14 F14 O2



CM 3

CRN 188739-86-8

CMF C15 H19 F3 O2



- IC ICM G03F007-039
ICS C08F212-14; C08F216-14; C08F218-10; C08F220-22; C08F232-04;
H01L021-027
- CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 76
- IT 66003-78-9 153698-46-5 197447-16-8 365971-61-5
(**photoacid** generator in pos.-working photoresist
composition suitable for semiconductor device fabrication with 157
nm laser)
- IT 670228-10-1P 670228-12-3P 670228-14-5P 670228-15-6P
670228-17-8P 670228-18-9P 670228-19-0P 670228-20-3P
670228-23-6P 670228-24-7P **670228-26-9P**
(preparation of alkaline developable resin for pos.-working
photoresist composition suitable for semiconductor device
fabrication with 157 nm laser)
- IT 144317-44-2P, Triphenylsulfonium nonafluorobutanesulfonate
205682-99-1P 365971-70-6P
(preparation of **photoacid** generator for pos.-working
photoresist composition suitable for semiconductor device
fabrication with 157 nm laser)
- IT 121-65-3, 4-Dodecylbenzenesulfonic acid 375-73-5,
Nonafluorobutanesulfonic acid 2706-90-3, Nonafluoropentanoic
acid 3744-08-9, Triphenylsulfonium iodide
(preparation of **photoacid** generator for pos.-working
photoresist composition suitable for semiconductor device
fabrication with 157 nm laser)

L60 ANSWER 19 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:98005 HCAPLUS

DOCUMENT NUMBER: 140:172185

TITLE: Positive-working resist composition containing
photoacid and resin suitable for
157-nm excimer laser

INVENTOR(S): Mizutani, Kazuyoshi; Sasaki, Tomoya; Kanna, Shinichi
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 61 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

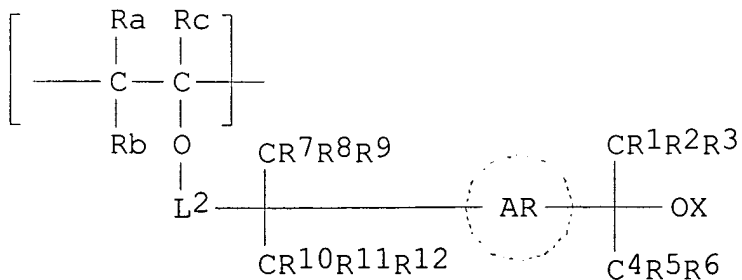
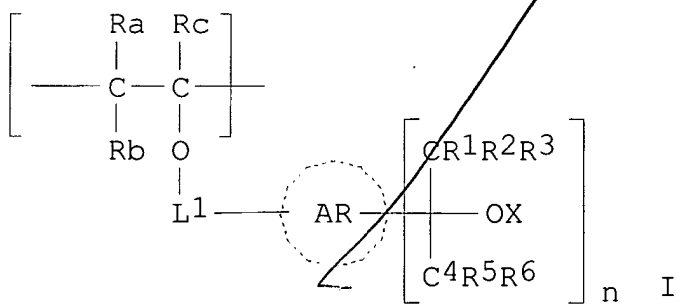
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004037978	A2	20040205	JP 2002-196924	2002 0705

PRIORITY APPLN. INFO.:

JP 2002-196924

2002
0705

GI



AB The pos.-working resist composition comprises (A) a resin I (Ra-c = H, F, fluorinated alkyl; L1 = single, divalent bonding group; R1-6 = H, F, fluorinated alkyl; AR = cyclic hydrocarbon; n = 1, 2; and X = group decomposable with acid or H) whose solubility in an alkali developer increases upon the interaction with a **photoacid** and (B) a **photoacid**. Alternatively, the resin is represented by II (R7-12 = R1-6). The composition exhibited sufficient

optical transparency at 157 nm.

IT **654076-30-9P 654076-32-1P**

(resin; pos.-working **resist** composition containing **photoacid** and resin suitable for 157-nm excimer laser)

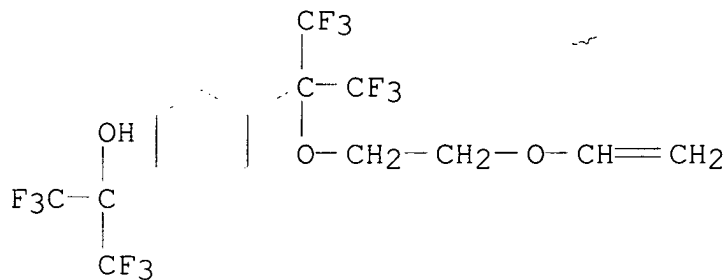
RN 654076-30-9 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol and 4-[1-[2-(ethenyloxy)ethoxy]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]- α,α -bis(trifluoromethyl)cyclohexanemethanol (9CI) (CA INDEX NAME)

CM 1

CRN 654076-29-6

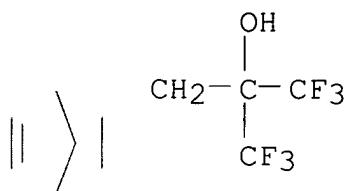
CMF C16 H18 F12 O3



CM 2

CRN 196314-61-1

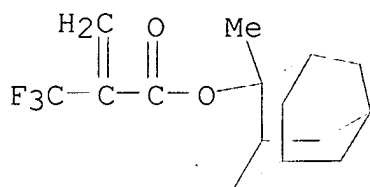
CMF C11 H12 F6 O



CM 3

CRN 188739-86-8

CMF C15 H19 F3 O2



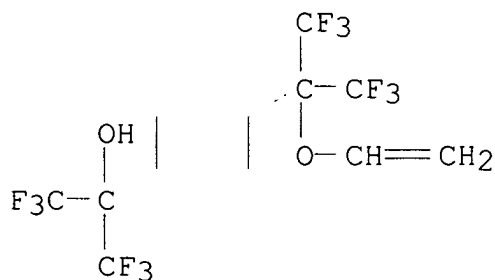
RN 654076-32-1 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol and 4-[1-(ethenyloxy)-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]- α,α -bis(trifluoromethyl)cyclohexanemethanol (9CI) (CA INDEX NAME)

CM 1

CRN 654076-31-0

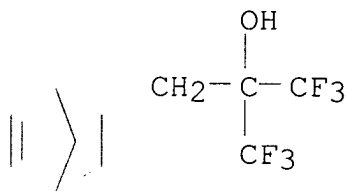
CMF C14 H14 F12 O2



CM 2

CRN 196314-61-1

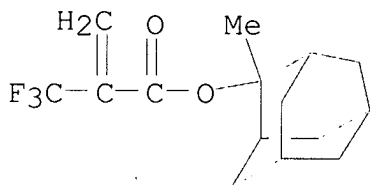
CMF C11 H12 F6 O



CM 3

CRN 188739-86-8

CMF C15 H19 F3 O2



IT 654076-34-3

(resin; pos.-working resist composition containing **photoacid**
and resin suitable for 157-nm excimer laser)

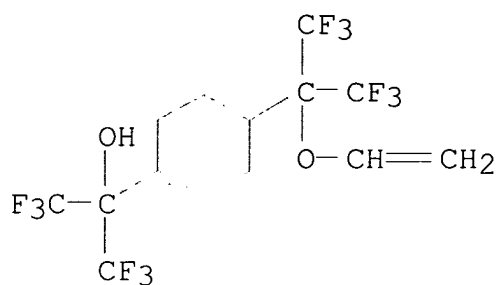
RN 654076-34-3 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-(trifluoromethyl)-,
1,1-dimethylethyl ester, polymer with 4-[1-(ethenyloxy)-2,2,2-
trifluoro-1-(trifluoromethyl)ethyl]- α,α -
bis(trifluoromethyl)cyclohexanemethanol and 3-
hydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl 2-(trifluoromethyl)-2-
propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 654076-31-0

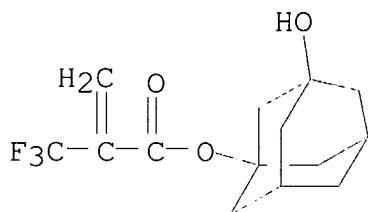
CMF C14 H14 F12 O2



CM 2

CRN 521913-15-5

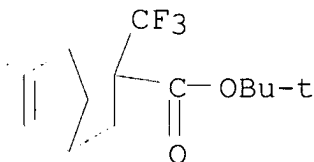
CMF C14 H17 F3 O3



CM 3

CRN 365568-55-4

CMF C13 H17 F3 O2



IC ICM G03F007-039

ICS C08F016-26; C08F220-22; H01L021-027

CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 Section cross-reference(s): 35, 38

ST resist photoresist compn **photoacid** resin vacuum UV

IT Photoresists

(UV, vacuum-; pos.-working resist composition containing

photoacid and resin suitable for 157-nm excimer laser)

IT Resists
 (pos.-working resist composition containing **photoacid** and resin suitable for 157-nm excimer laser)

IT 1511-10-0 144317-44-2 205682-99-1 241806-75-7 338445-29-7 654076-38-7
 (**photoacid**; pos.-working resist composition containing **photoacid** and resin suitable for 157-nm excimer laser)

IT **654076-30-9P 654076-32-1P**
 (resin; pos.-working **resist** composition containing **photoacid** and resin suitable for 157-nm excimer laser)

IT 654076-33-2 **654076-34-3** 654076-35-4 654076-36-5
 (resin; pos.-working resist composition containing **photoacid** and resin suitable for 157-nm excimer laser)

L60 ANSWER 20 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:947777 HCAPLUS

DOCUMENT NUMBER: 140:21269

TITLE: Positive-working photoresist composition

INVENTOR(S): Mizutani, Kazuyoshi; Kanna, Shinichi; Sasaki, Tomoya

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 137 pp.
 CODEN: EPXXDW

DOCUMENT TYPE: **Patent**

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1367440	A2	20031203	EP 2003-12142	2003 0602
EP 1367440	A3	20040630		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004004226	A2	20040108	JP 2002-158821	2002 0531
JP 2004004227	A2	20040108	JP 2002-158822	2002 0531

JP 2004012510 A2 20040115 JP 2002-161617

2002
0603

JP 2004125835 A2 20040422 JP 2002-285486

2002
0930

US 2004005512 A1 20040108 US 2003-448041

2003
0530

PRIORITY APPLN. INFO.:

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A

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A

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JP 2002-161617

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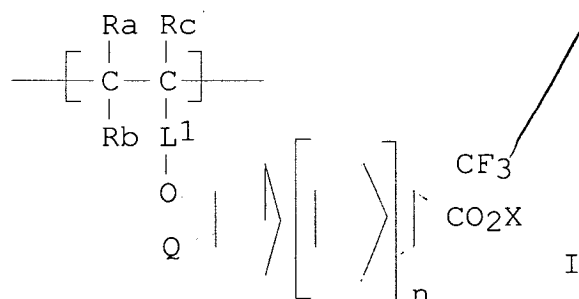
2002
0603

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JP 2002-285486

A

2002
0930

GI



AB A pos.-working photoresist composition comprises: (A1) a resin containing a repeating unit represented by I (Ra-c = H, F, fluoroalkyl; L1 = single bond, divalent connecting group; X = H, group capable of decomposing by the action of an acid; n = 0,1; Q =H, hydroxyl group),

which increases the solubility in an alkali developing solution by the action of an acid, and (B) a compound capable of generating an acid upon irradiation with one of actinic rays and radiation.

IT **630127-20-7P 630127-22-9P 630127-30-9P**
630127-32-1P

(pos.-working **photoresist** composition containing)

RN 630127-20-7 HCAPLUS

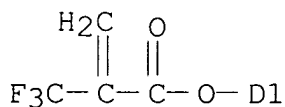
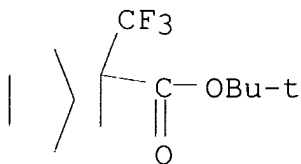
CN Bicyclo[2.2.1]heptane-2-carboxylic acid, 5(or 6)-[[1-oxo-2-(trifluoromethyl)-2-propenyl]oxy]-2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 630127-19-4

CMF C17 H20 F6 O4

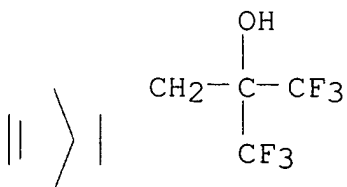
CCI IDS



CM 2

CRN 196314-61-1

CMF C11 H12 F6 O



RN 630127-22-9 HCAPLUS

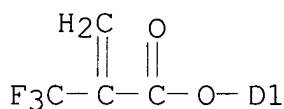
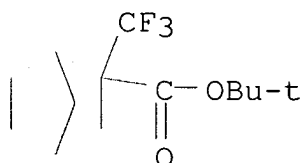
CN Bicyclo[2.2.1]heptane-2-carboxylic acid, 5(or 6)-hydroxy-6(or 5)-[[1-oxo-2-(trifluoromethyl)-2-propenyl]oxy]-2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 630127-21-8

CMF C17 H20 F6 O5

CCI IDS

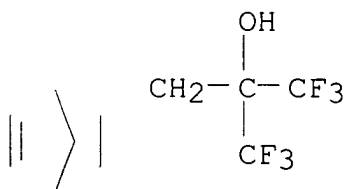


D1-OH

CM 2

CRN 196314-61-1

CMF C11 H12 F6 O



RN 630127-30-9 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 5(or 6)-[2-[[1,1-dimethylethoxy)carbonyl]oxy]-3,3,3-trifluoro-2-

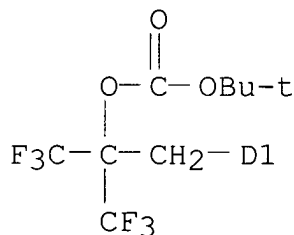
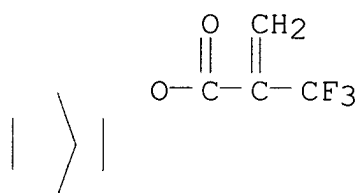
(trifluoromethyl)propyl]bicyclo[2.2.1]hept-2-yl ester, polymer
with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-
2-ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 630127-29-6

CMF C20 H23 F9 O5

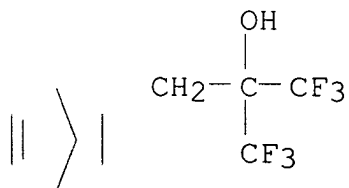
CCI IDS



CM 2

CRN 196314-61-1

CMF C11 H12 F6 O



RN 630127-32-1 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 5(or 6)-[2-[[[(1,1-dimethylethoxy)carbonyl]oxy]-3,3,3-trifluoro-2-(trifluoromethyl)propyl]-3-hydroxybicyclo[2.2.1]hept-2-yl ester,

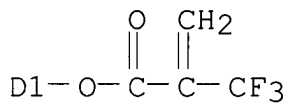
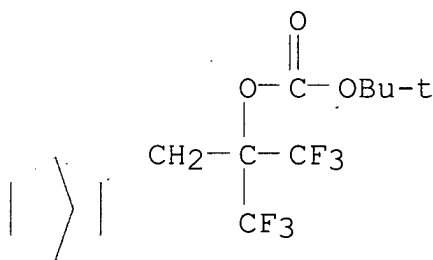
polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 630127-31-0

CMF C20 H23 F9 O6

CCI IDS

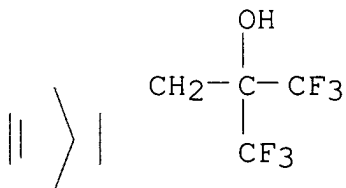


D1-OH

CM 2

CRN 196314-61-1

CMF C11 H12 F6 O



IT 630115-54-7P 630115-56-9P 630115-57-0P
 630115-59-2P 630127-43-4P 630127-85-4P
 630127-91-2P 630127-92-3P 630127-95-6P
 630127-96-7P

(resin for pos.-working **photoresist** composition)

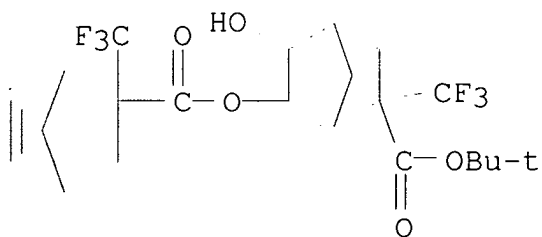
RN 630115-54-7 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-(trifluoromethyl)-, 6-[(1,1-dimethylethoxy)carbonyl]-3-hydroxy-6-(trifluoromethyl)bicyclo[2.2.1]hept-2-yl ester, polymer with 3-hydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl 2-(trifluoromethyl)-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 630115-53-6

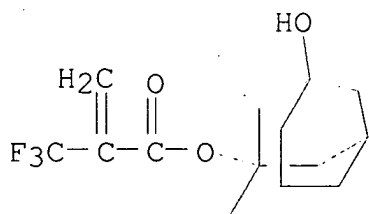
CMF C22 H26 F6 O5



CM 2

CRN 521913-15-5

CMF C14 H17 F3 O3

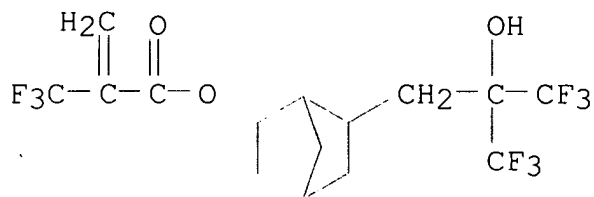


RN 630115-56-9 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-(trifluoromethyl)-, 6-[(1,1-dimethylethoxy)carbonyl]-3-hydroxy-6-(trifluoromethyl)bicyclo[2.2.1]hept-2-yl ester, polymer with 6-[3,3,3-trifluoro-2-hydroxy-2-(trifluoromethyl)propyl]bicyclo[2.2.1]hept-2-yl 2-(trifluoromethyl)-2-propenoate (9CI) (CA INDEX NAME)

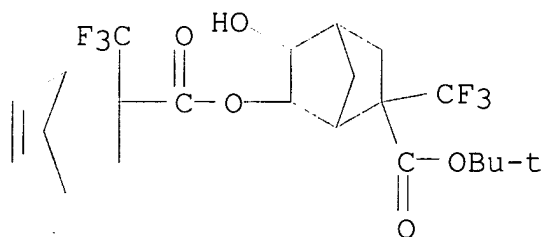
CM 1

CRN 630115-55-8
CMF C15 H15 F9 O3



CM 2

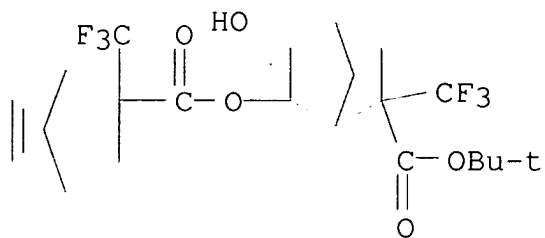
CRN 630115-53-6
CMF C22 H26 F6 O5



RN 630115-57-0 HCAPLUS
CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-(trifluoromethyl)-, 6-[(1,1-dimethylethoxy)carbonyl]-3-hydroxy-6-(trifluoromethyl)bicyclo[2.2.1]hept-2-yl ester, polymer with 2,2,2-trifluoro-1-[4-[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]cyclohexyl]-1-(trifluoromethyl)ethyl 2-(trifluoromethyl)-2-propenoate (9CI) (CA INDEX NAME)

CM 1

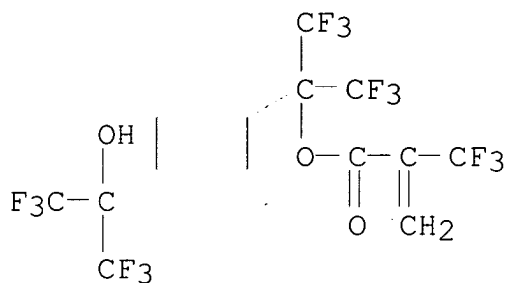
CRN 630115-53-6
CMF C22 H26 F6 O5



CM. 2

CRN 479072-83-8

CMF C16 H13 F15 O3



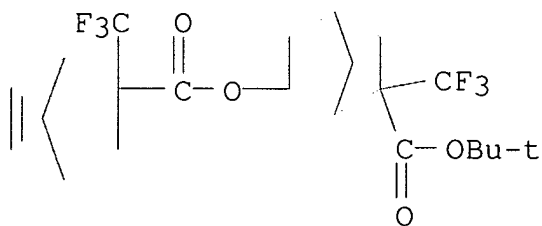
RN 630115-59-2 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-(trifluoromethyl)-, 6-[(1,1-dimethylethoxy)carbonyl]-6-(trifluoromethyl)bicyclo[2.2.1]hept-2-yl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol and 1,1-dimethylethyl 2-(trifluoromethyl)-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 630115-58-1

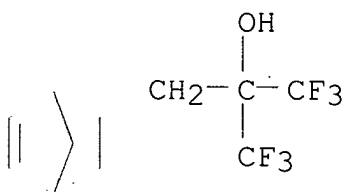
CMF C22 H26 F6 O4



CM 2

CRN 196314-61-1

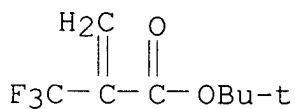
CMF C11 H12 F6 O



CM 3

CRN 105935-24-8

CMF C8 H11 F3 O2



RN 630127-43-4 HCAPLUS

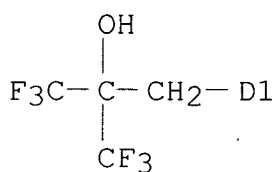
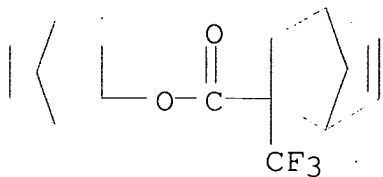
CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-(trifluoromethyl)-,
5(or 6)-[3,3,3-trifluoro-2-hydroxy-2-(trifluoromethyl)propyl]bicyc
lo[2.2.1]hept-2-yl ester, polymer with 2-
methyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-(trifluoromethyl)-2-
propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 630127-42-3

CMF C20 H21 F9 O3

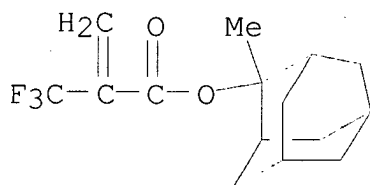
CCI IDS



CM 2

CRN 188739-86-8

CMF C15 H19 F3 O2



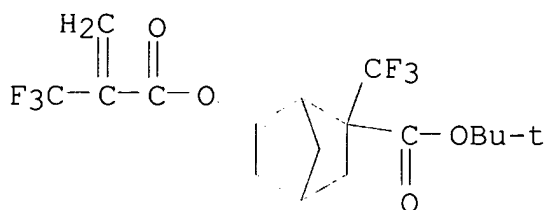
RN 630127-85-4 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-(trifluoromethyl)-, 5(or 6)-[3;3,3-trifluoro-2-hydroxy-2-(trifluoromethyl)propyl]bicyclo[2.2.1]hept-2-yl ester, polymer with 1,1-dimethylethyl 6-[[1-oxo-2-(trifluoromethyl)-2-propenyl]oxy]-2-(trifluoromethyl)bicyclo[2.2.1]heptane-2-carboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 630127-84-3

CMF C17 H20 F6 O4

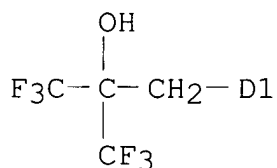
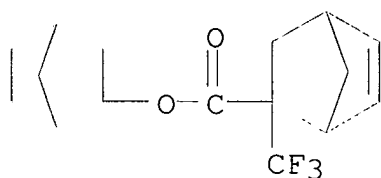


CM 2

CRN 630127-42-3

CMF C20 H21 F9 O3

CCI IDS



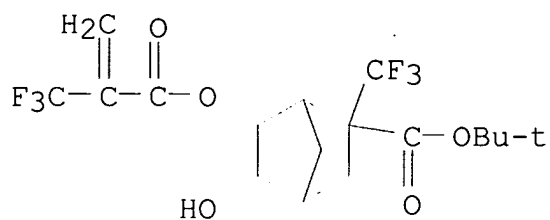
RN 630127-91-2 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-(trifluoromethyl)-, 5(or 6)-[3,3,3-trifluoro-2-hydroxy-2-(trifluoromethyl)propyl]bicyclo[2.2.1]hept-2-yl ester, polymer with 1,1-dimethylethyl 5-hydroxy-6-[[1-oxo-2-(trifluoromethyl)-2-propenyl]oxy]-2-(trifluoromethyl)bicyclo[2.2.1]heptane-2-carboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 630127-90-1

CMF C17 H20 F6 O5

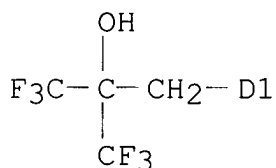
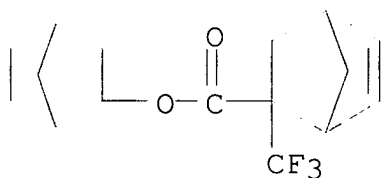


CM 2

CRN 630127-42-3

CMF C20 H21 F9 O3

CCI IDS



RN 630127-92-3 HCAPLUS

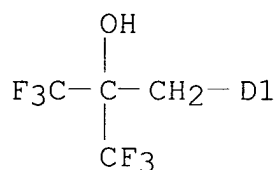
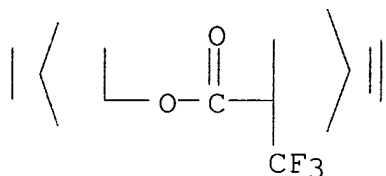
CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-(trifluoromethyl)-, 5(or 6)-[3,3,3-trifluoro-2-hydroxy-2-(trifluoromethyl)propyl]bicyclo[2.2.1]hept-2-yl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol and 1,1-dimethylethyl 2-(trifluoromethyl)-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 630127-42-3

CMF C20 H21 F9 O3

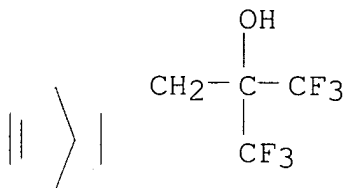
CCI IDS



CM 2

CRN 196314-61-1

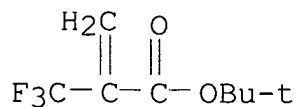
CMF C11 H12 F6 O



CM 3

CRN 105935-24-8

CMF C8 H11 F3 O2



RN 630127-95-6 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with 1,1-dimethylethyl 2-(trifluoromethyl)-2-propenoate and 5(or 6)-[3,3,3-trifluoro-2-hydroxy-2-(trifluoromethyl)propyl]bicyclo[2.2.1]hept-2-yl

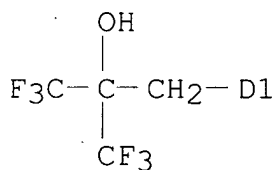
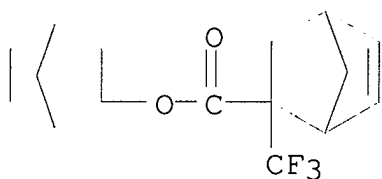
2-(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-carboxylate (9CI)
(CA INDEX NAME)

CM 1

CRN 630127-42-3

CMF C20 H21 F9 O3

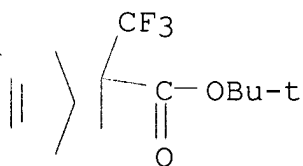
CCI IDS



CM 2

CRN 365568-55-4

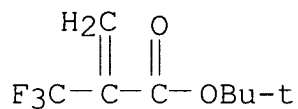
CMF C13 H17 F3 O2



CM 3

CRN 105935-24-8

CMF C8 H11 F3 O2



RN 630127-96-7 HCAPLUS

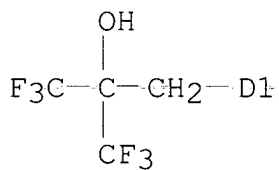
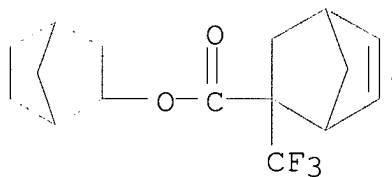
CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-(trifluoromethyl)-, 5(or 6)-[3,3,3-trifluoro-2-hydroxy-2-(trifluoromethyl)propyl]bicyclo[2.2.1]hept-2-yl ester, polymer with 1,1-dimethylethyl 2-(trifluoromethyl)-2-propenoate and 5-ethenyl- $\alpha,\alpha,\alpha',\alpha'$ -tetrakis(trifluoromethyl)-1,3-benzenedimethanol (9CI) (CA INDEX NAME)

CM 1

CRN 630127-42-3

CMF C20 H21 F9 O3

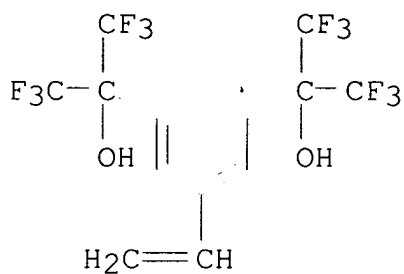
CCI IDS



CM 2

CRN 568587-26-8

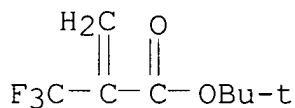
CMF C14 H8 F12 O2



CM 3

CRN 105935-24-8

CMF C8 H11 F3 O2



IT 630115-46-7P 630115-47-8P 630127-74-1P

630127-78-5P 630127-79-6P

(resin for pos.-working **photoresist** composition)

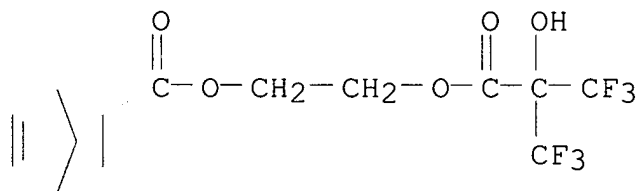
RN 630115-46-7 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-[3,3,3-trifluoro-2-hydroxy-1-oxo-2-(trifluoromethyl)propoxy]ethyl ester, polymer with 1,1-dimethylethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

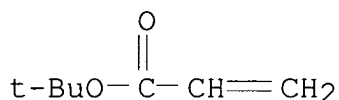
CRN 630115-42-3

CMF C14 H14 F6 O5



CM 2

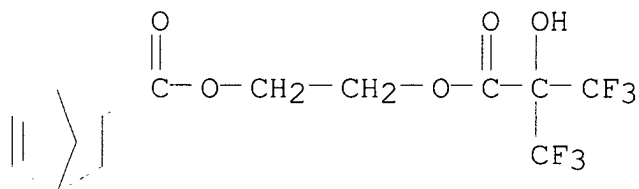
CRN 1663-39-4
CMF C7 H12 O2



RN 630115-47-8 HCAPLUS
CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-[3,3,3-trifluoro-2-hydroxy-1-oxo-2-(trifluoromethyl)propoxy]ethyl ester, polymer with 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-propenoate (9CI) (CA INDEX NAME)

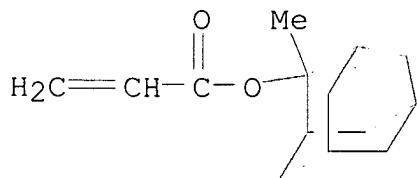
CM 1

CRN 630115-42-3
CMF C14 H14 F6 O5



CM 2

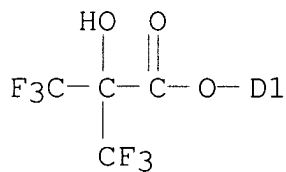
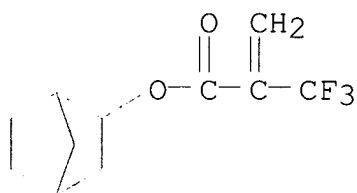
CRN 249562-06-9
CMF C14 H20 O2



RN 630127-74-1 HCAPLUS
CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 4-[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]cyclohexyl ester, polymer with 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-propenoate and 5(or

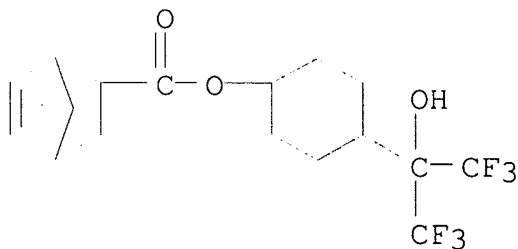
CM 1

CCI IDS



CM 2

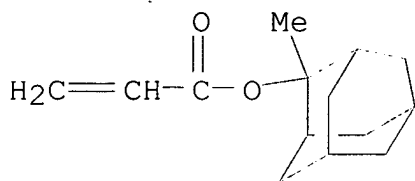
CMF C17 H20 F6 O3



CM 3

CRN 249562-06-9

CMF C14 H20 O2



RN 630127-78-5 HCAPLUS

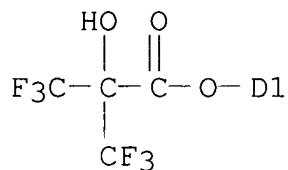
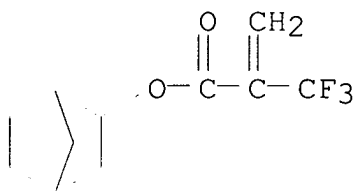
CN 2-Propenoic acid, 2-(trifluoromethyl)-, 5(or 6)-[3,3,3-trifluoro-2-hydroxy-1-oxo-2-(trifluoromethyl)propoxy]bicyclo[2.2.1]hept-2-yl ester, polymer with 1-(1,1-dimethylethoxy)-4-ethenylbenzene (9CI)
(CA INDEX NAME)

CM 1

CRN 630127-40-1

CMF C15 H13 F9 O5

CCI IDS

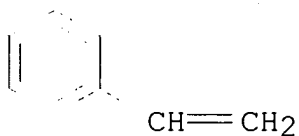


CM 2

CRN 95418-58-9

CMF C12 H16 O

t-BuO



RN 630127-79-6 HCAPLUS

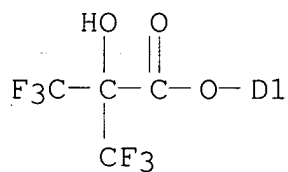
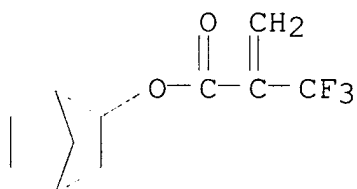
CN 2-Propenoic acid, 2-(trifluoromethyl)-, 5(or 6)-[3,3,3-trifluoro-2-hydroxy-1-oxo-2-(trifluoromethyl)propoxy]bicyclo[2.2.1]hept-2-yl ester, polymer with 1-ethenyl-4-[1-(2-methylpropoxy)ethoxy]benzene (9CI) (CA INDEX NAME)

CM 1

CRN 630127-40-1

CMF C15 H13 F9 O5

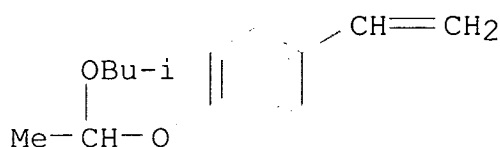
CCI IDS



CM 2

CRN 192314-53-7

CMF C14 H20 O2



IC ICM G03F007-039
ICS G03F007-004

CC **74-5** (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
Section cross-reference(s): 35, 38

IT 144317-44-2 241806-75-7 338445-29-7 594865-71-1
(**photoacid** generator; pos.-working photoresist composition containing)

IT **630127-20-7P 630127-22-9P 630127-24-1P**
630127-26-3P 630127-28-5P 630127-30-9P
630127-32-1P 630127-34-3P 630127-36-5P 630127-39-8P
630127-72-9P 630127-73-0P
(pos.-working **photoresist** composition containing)

IT 375-73-5 2706-90-3, Nonafluoropentanoic acid 3744-08-9,
Triphenylsulfonium iodide 27176-87-0
(preparation of **photoacid** generator for pos.-working photoresist composition)

IT **630115-54-7P 630115-56-9P 630115-57-0P**
630115-59-2P 630115-62-7P 630115-63-8P
630127-43-4P 630127-85-4P 630127-91-2P
630127-92-3P 630127-95-6P 630127-96-7P
(resin for pos.-working **photoresist** composition)

IT **630115-46-7P 630115-47-8P 630115-48-9P**
630115-49-0P 630115-50-3P 630115-51-4P 630115-52-5P
630127-74-1P 630127-78-5P 630127-79-6P
(resin for pos.-working **photoresist** composition)

L60 ANSWER 21 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:929992 HCAPLUS

DOCUMENT NUMBER: 140:10623

TITLE: Chemically amplified photoresist compositions with excellent transmission of short-wavelength radiation and reduced development defects

INVENTOR(S): Nishimura, Yukio; Nishimura, Isao; Kobayashi, Eiichi; Shimokawa, Tsutomu

PATENT ASSIGNEE(S): JSR Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 42 pp.
CODEN: JKXXAF

DOCUMENT TYPE: **Patent**

LANGUAGE: Japanese

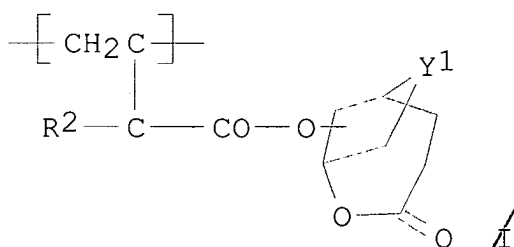
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003337417	A2	20031128	JP 2002-146290	2002 0521

PRIORITY APPLN. INFO.:

<--
JP 2002-146290
2002
0521

GI



AB The compns. contain alkali-soluble polymers (A; which become alkali-soluble on reaction with acids) having repeating units $C(C_nF_{2n+1})(C:OOC(R_1)_3)CH_2$ (R_1 = C1-4 linear or branched alkyl or its derivative, C4-20 alicyclic hydrocarbyl or its derivative; 2 of R_1 may form alicyclic ring; n = 1-8) and $CR_2(C:OOR)CH_2$ [R = I, 7-oxo-6-oxabicyclo[3.2.1]octanyl, R_3 -(un)substituted 2-oxotetrahydropyranyl, Y_2R' ; R' = R_3 -(un)substituted 2-oxotetrahydrofuranlyl; R_2 = H, me; Y_1 = methylene, methylmethylene, dimethylmethylene, O, S; R_3 = C1-5 linear or branched alkyl or alkoxyl; Y_2 = single bond, methylene] and radiation-sensitive **photoacid** generators (B).

IT **627528-88-5P 627528-89-6P 627528-90-9P**
(chemical amplified **photoresists** containing adamantyl fluoroalkylacrylate copolymers with good transmission of short-wavelength radiation and reduced development defects)

RN 627528-88-5 HCAPLUS

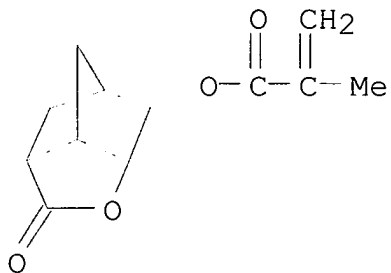
CN 2-Propenoic acid, 2-methyl-, hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl ester, polymer with 3-hydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl 2-methyl-2-propenoate, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-methyl-2-propenoate and 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-(trifluoromethyl)-2-

propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 254900-07-7

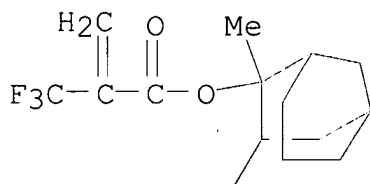
CMF C12 H14 O4



CM 2

CRN 188739-86-8

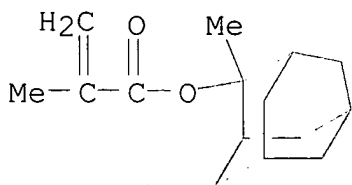
CMF C15 H19 F3 O2



CM 3

CRN 177080-67-0

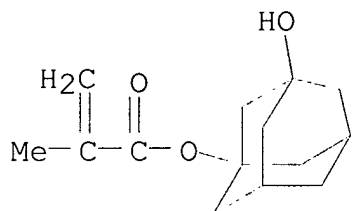
CMF C15 H22 O2



CM 4

CRN 115372-36-6

CMF C14 H20 O3



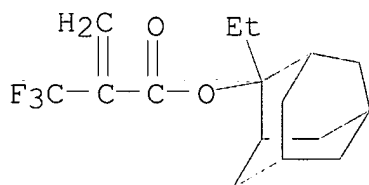
RN 627528-89-6 HCAPLUS.

CN 2-Propenoic acid, 2-methyl-, 2-ethyltricyclo[3.3.1.13,7]dec-2-yl ester, polymer with 2-ethyltricyclo[3.3.1.13,7]dec-2-yl 2-(trifluoromethyl)-2-propenoate, hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-methyl-2-propenoate and 3-hydroxytricyclo[3.3.1.13,7]dec-1-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 444168-44-9

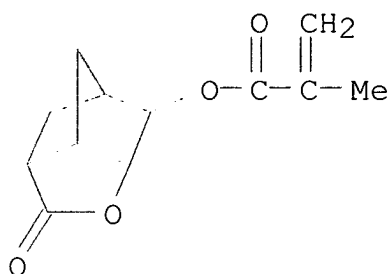
CMF C16 H21 F3 O2



CM 2

CRN 254900-07-7

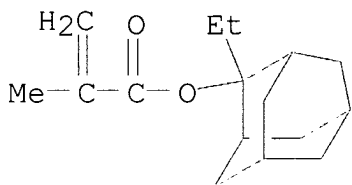
CMF C12 H14 O4



CM 3

CRN 209982-56-9

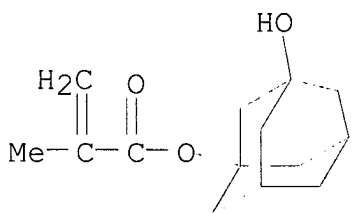
CMF C16 H24 O2



CM 4

CRN 115372-36-6

CMF C14 H20 O3



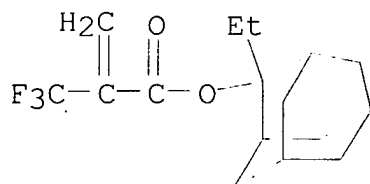
RN 627528-90-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl ester, polymer with 2-ethyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-(trifluoromethyl)-2-propenoate, 3-hydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl 2-methyl-2-propenoate and 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 444168-44-9

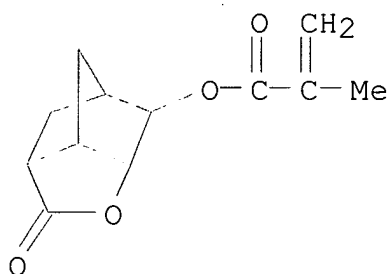
CMF C16 H21 F3 O2



CM 2

CRN 254900-07-7

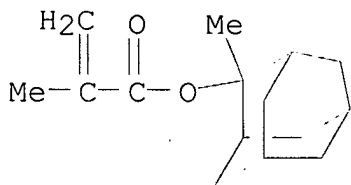
CMF C12 H14 O4



CM 3

CRN 177080-67-0

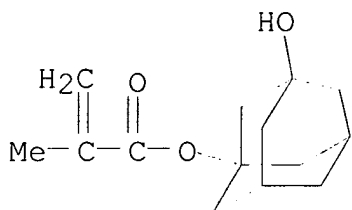
CMF C15 H22 O2



CM 4

CRN 115372-36-6

CMF C14 H20 O3



IC ICM G03F007-039

ICS C08F220-24; C08F220-28; H01L021-027

CC **74-5** (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)IT **627528-88-5P 627528-89-6P 627528-90-9P**

627528-91-0P

(chemical amplified **photoresists** containing adamantyl fluoroalkylacrylate copolymers with good transmission of short-wavelength radiation and reduced development defects)

IT 209482-18-8

(**photoacid** generator; chemical amplified photoresists containing adamantyl fluoroalkylacrylate copolymers with good transmission of short-wavelength radiation and reduced development defects)

L60 ANSWER 22 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:890218 HCAPLUS

DOCUMENT NUMBER: 139:388472

TITLE: Chemically amplified positive photoresists for ≤ 160 nm vacuum UV lithography

INVENTOR(S): Kanna, Shinichi; Mizutani, Kazuyoshi; Sasaki, Tomoya

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 36 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003322972	A2	20031114	JP 2002-130718	

2002
0502

PRIORITY APPLN. INFO.:

JP 2002-130718

2002
0502

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT
*

AB The photoresists comprise (a) ionic compds. and nonionic compds. both generating acids by radiation, (b) polymers having repeating units chosen from I, II, CH₂CCF₃CO₂R_{4a}, III, CH₂CR_{1a}[C₆H₄[C(CR₄₁R₄₂R₄₃)(CR₄₄R₄₅R₄₆)OX]_n], and IV (X, R_{3a}, R_{4a} = H, acid-labile group; R₁₁-R₁₆, R₂₁-R₃₂, R₄₁-R₄₆, R₅₁-R₅₆ = H, F, fluoroalkyl, ≥1 of R₁₁-R₁₆ ≠ H, ≥1 of R₂₁-R₃₂ ≠ H, ≥1 of R₄₁-R₄₆ ≠ H, ≥1 of R₅₁-R₅₆ ≠ H; R_{1a}, R_{2a} = H, F, Cl, Br, cyano, CF₃; m = 0, 1; n = 1-5), which increase solubility in alkaline developers by acids, and (c) solvents. The compns. show wide defocus latitude and defect-free patterns.

IT **370866-39-0P 607710-65-6P 610301-01-4P**
(chemical amplified pos. **photoresists** for ≤160 nm vacuum UV lithog.)

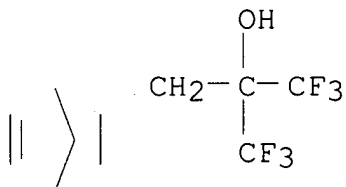
RN 370866-39-0 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with α,α-bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

CM 1

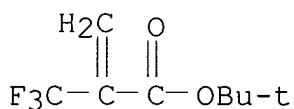
CRN 196314-61-1

CMF C11 H12 F6 O



CM 2

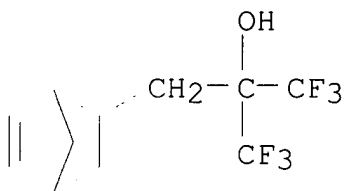
CRN 105935-24-8
 CMF C8 H11 F3 O2



RN 607710-65-6 HCAPLUS
 CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

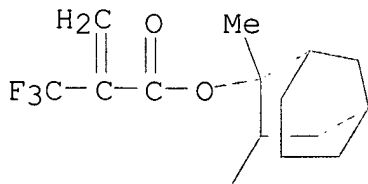
CM 1

CRN 196314-61-1
 CMF C11 H12 F6 O



CM 2

CRN 188739-86-8
 CMF C15 H19 F3 O2



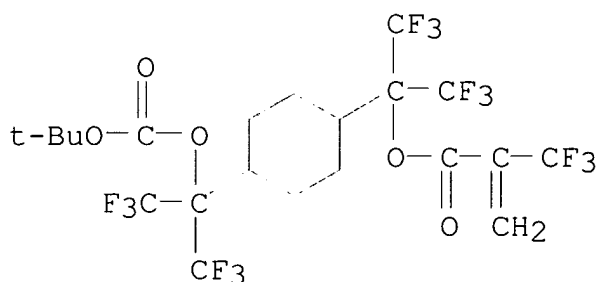
RN 610301-01-4 HCAPLUS
 CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1-[4-[1-[[[(1,1-

dimethylethoxy)carbonyl]oxy]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]cyclohexyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 610300-99-7

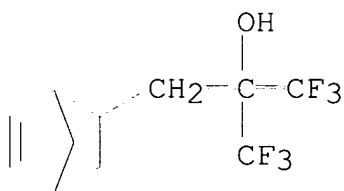
CMF C21 H21 F15 O5



CM 2

CRN 196314-61-1

CMF C11 H12 F6 O



IC ICM G03F007-039

ICS C08F010-00; C08F012-22; C08F020-22; C08F020-26; C08F032-00; G03F007-004; H01L021-027

CC 74-5 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
Section cross-reference(s): 38

ST pos photoresist vacuum UV transparency fluoropolymer defocus latitude; fluoromethyl acrylate butyl bicycloheptenylfluoropropanol polymer VUV resist; ionic nonionic **photoacid** generator fluoropolymer photoresist

IT 143336-94-1P 370102-83-3P **370866-39-0P** 406702-00-9P

430437-18-6P 459418-30-5P **607710-65-6P** 607710-66-7P
 607710-67-8P 607710-68-9P 607710-69-0P 607710-70-3P
 607710-71-4P 607710-72-5P 607710-73-6P 607710-76-9P
 607710-77-0P 607710-78-1P 610300-97-5P 610300-98-6P
 610301-00-3P **610301-01-4P** 610301-03-6P

(chemical amplified pos. **photoresists** for ≤ 160 nm
 vacuum UV lithog.)

IT 1886-74-4 19361-97-8 56530-39-3 66003-78-9 67695-82-3
 138529-81-4 144089-15-6 160481-38-9 171292-12-9
 197447-16-8 205682-99-1 299416-57-2 301664-71-1
 301664-72-2 335385-79-0 347193-29-7 398141-19-0
 398141-21-4 414911-37-8 454471-05-7 454471-07-9
 454471-09-1 474510-86-6 477327-75-6 477327-90-5
 477327-95-0 477328-12-4 540729-47-3

(**photoacid** generator; chemical amplified pos.
 photoresists for ≤ 160 nm vacuum UV lithog.)

L60 ANSWER 23 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STM

ACCESSION NUMBER: 2003:868612 HCAPLUS

DOCUMENT NUMBER: 139:371875

TITLE: Positive-working resist composition for
 vacuum-UV exposure

INVENTOR(S): Kanna, Shinichi; Mizutani, Kazuyoshi; Sasaki,
 Tomoya

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2003316005	A2	20031106	JP 2002-122269	2002 0424
PRIORITY APPLN. INFO.:			JP 2002-122269	2002 0424

GI

★

AB The pos.-working resist composition comprises (a) a **photoacid** represented by I or II (R1a-27a = H, alkyl, alkoxy, etc.; and X- = anion), (b) a resin which increases its solubility in an alkali developer upon contact with an acid, and (c) a solvent. The composition further comprises a surfactant containing Si and/or F.

The

composition further comprises an organic base compound The pos.-working resist composition exhibited a suppressed outgasing.

IT **370866-39-0P**

(pos.-working **resist** composition for vacuum-UV exposure)

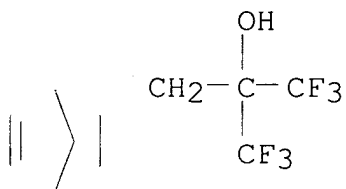
RN 370866-39-0 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 196314-61-1

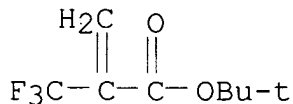
CMF C11 H12 F6 O



CM 2

CRN 105935-24-8

CMF C8 H11 F3 O2



IT **607710-65-6 610301-01-4**

(pos.-working resist composition for vacuum-UV exposure)

RN 607710-65-6 HCAPLUS

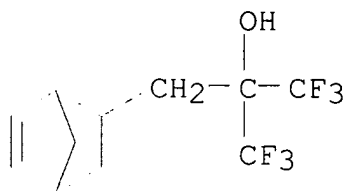
CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2-

methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with
 α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-
 ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 196314-61-1

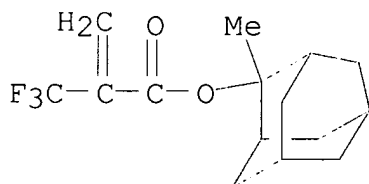
CMF C11 H12 F6 O



CM 2

CRN 188739-86-8

CMF C15 H19 F3 O2



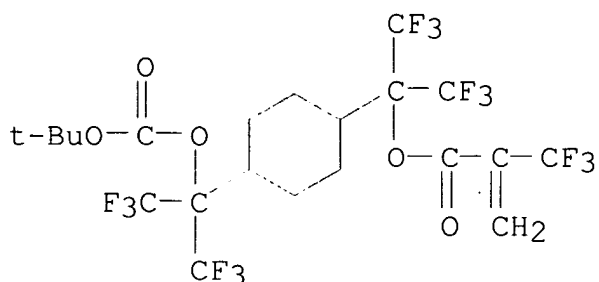
RN 610301-01-4 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1-[4-[1-[[[(1,1-dimethylethoxy)carbonyl]oxy]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]cyclohexyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 610300-99-7

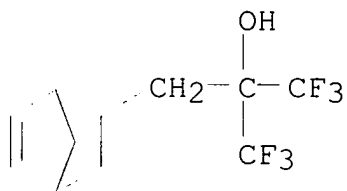
CMF C21 H21 F15 O5



CM 2

CRN 196314-61-1

CMF C11 H12 F6 O



IC ICM G03F007-039
ICS C08F020-30; G03F007-004; H01L021-027

CC 74-5 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
Section cross-reference(s): 35, 37, 38

ST pos working resist photoresist compn vacuum UV exposure;
photoacid resin surfactant

IT 297742-41-7 376600-59-8 405284-04-0 405284-05-1
405284-06-2 620172-21-6 620172-23-8 620172-25-0
620172-26-1 620172-27-2 620172-28-3 620172-29-4
620172-30-7 620172-31-8 620172-32-9 620172-33-0
620172-34-1 620172-35-2 620172-36-3 620172-38-5
620172-40-9
(**photoacid**; pos.-working resist composition for vacuum-UV exposure)

IT **370866-39-0P**
(pos.-working **resist** composition for vacuum-UV exposure)

IT 143336-94-1 370102-83-3 406702-00-9 430437-18-6
459418-30-5 **607710-65-6** 607710-66-7 607710-67-8
607710-68-9 607710-69-0 607710-70-3 607710-71-4
607710-72-5 607710-73-6 607710-76-9 607710-77-0
607710-78-1 610300-97-5 610300-98-6 610301-00-3

610301-01-4 610301-03-6

(pos.-working resist composition for vacuum-UV exposure)

L60 ANSWER 24 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:853314 HCAPLUS

DOCUMENT NUMBER: 139:343479

TITLE: Sulfonium compounds as radiation-sensitive
acid generators and resist compositions
containing them

INVENTOR(S): Kodama, Kunihiro

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 66 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003307839	A2	20031031	JP 2002-112372	2002 0415
			JP 2002-112372	2002 0415

JP 2003307839

A2

20031031

JP 2002-112372

2002
0415

PRIORITY APPLN. INFO.:

JP 2002-112372

2002
0415

OTHER SOURCE(S): MARPAT 139:343479

AB (Ba)mAaS+Y1Y2 X- (I; Y1, Y2 = alkyl, aryl, aralkyl, heterocyclyl, oxoalkyl, oxoaralkyl; Y1 and Y2 may be bonded together to form a ring; Aa = direct bond, organic group; Ba = group having CONRa or SO2NRa; Ra = H, alkyl; m = 1-3; X- = nonnucleophilic anion), which generate acids upon irradiation with actinic ray or radiation, are claimed. Also claimed are resist compns. containing I, pos.-working resist compns. containing I and resins which are decomposed by acids

to show increased solubility to an alkaline developer, neg.-working resist

compns. containing I, water-insol. alkali-soluble resins, and crosslinking agents which crosslink to the alkali-soluble resins by acids, etc. The resist compns. containing I show high sensitivity, resolution, and good profile, and are especially suitable for irradiation with

far-UV and electron beam.

IT 159296-87-4P 200808-68-0P 312620-54-5P

325143-38-2P 370866-39-0P 398140-38-0P

398140-43-7P 398140-45-9P 405509-19-5P

482609-97-2P 508210-04-6P 521303-15-1P

521303-16-2P 524699-47-6P 574735-94-7P

607710-65-6P 610300-92-0P 610301-01-4P

617692-20-3P

(preparation of sulfonium compds. having amide or sulfonamide linkage as radiation-sensitive acid generators and

resist compns. containing them)

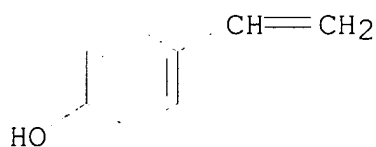
RN 159296-87-4 HCAPLUS

CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with
4-ethenylphenol (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

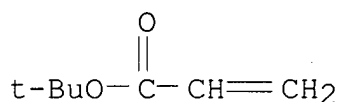
CMF C8 H8 O



CM 2

CRN 1663-39-4

CMF C7 H12 O2



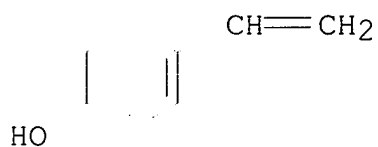
RN 200808-68-0 HCAPLUS

CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with
ethenylbenzene and 4-ethenylphenol (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

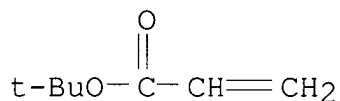
CMF C8 H8 O



CM 2

CRN 1663-39-4

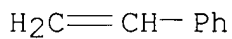
CMF C7 H12 O2



CM 3

CRN 100-42-5

CMF C8 H8



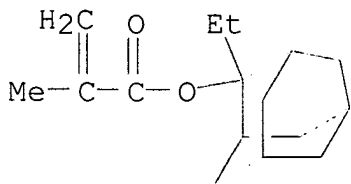
RN 312620-54-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyltricyclo[3.3.1.1^{3,7}]dec-2-yl
 ester, polymer with 3-hydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl
 2-methyl-2-propenoate and tetrahydro-4,4-dimethyl-2-oxo-3-furanyl
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 209982-56-9

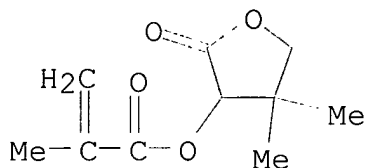
CMF C16 H24 O2



CM 2

CRN 156938-13-5

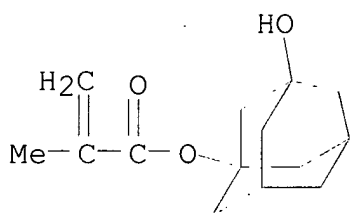
CMF C10 H14 O4



CM 3

CRN 115372-36-6

CMF C14 H20 O3



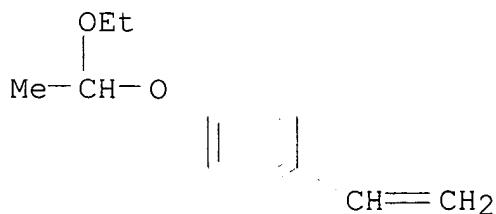
RN 325143-38-2 HCAPLUS

CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with
 1-ethenyl-4-(1-ethoxyethoxy)benzene and 4-ethenylphenol (9CI) (CA
 INDEX NAME)

CM 1

CRN 157057-20-0

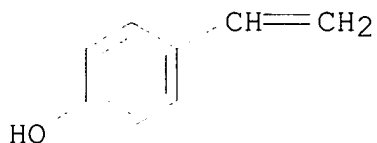
CMF C12 H16 O2



CM 2

CRN 2628-17-3

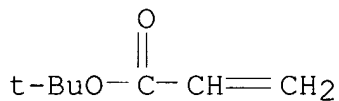
CMF C8 H8 O



CM 3

CRN 1663-39-4

CMF C7 H12 O2



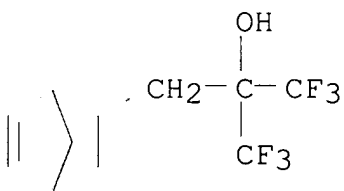
RN 370866-39-0 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester,
polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

CM 1

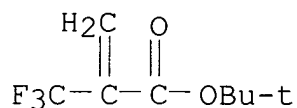
CRN 196314-61-1

CMF C11 H12 F6 O



CM 2

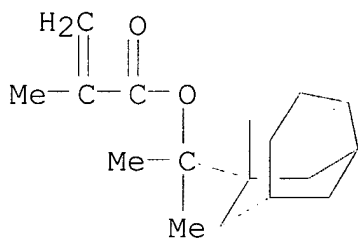
CRN 105935-24-8
CMF C8 H11 F3 O2



RN 398140-38-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 3-hydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl
ester, polymer with 1-methyl-1-tricyclo[3.3.1.1^{3,7}]dec-1-ylethyl
2-methyl-2-propenoate and tetrahydro-5-oxo-3-furanyl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

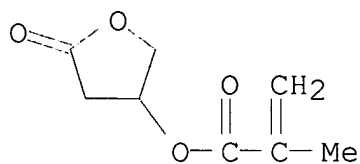
CM 1

CRN 279218-76-7
CMF C17 H26 O2



CM 2

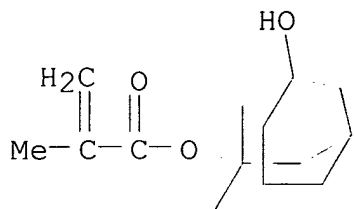
CRN 130224-95-2
CMF C8 H10 O4



CM 3

CRN 115372-36-6

CMF C14 H20 O3



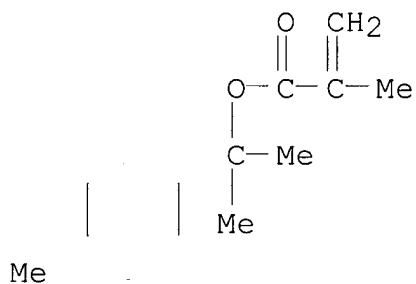
RN 398140-43-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl ester, polymer with 3-hydroxytricyclo[3.3.1.13,7]dec-1-yl 2-methyl-2-propenoate and 1-methyl-1-(4-methylcyclohexyl)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 351196-10-6

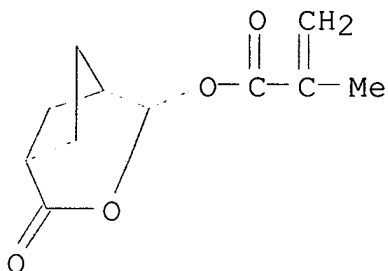
CMF C14 H24 O2



CM 2

CRN 254900-07-7

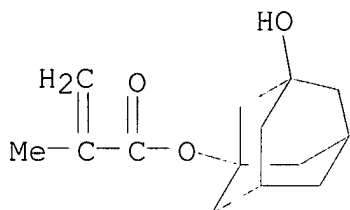
CMF C12 H14 O4



CM 3

CRN 115372-36-6

CMF C14 H20 O3



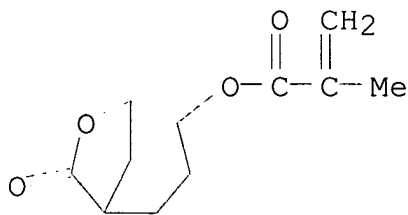
RN 398140-45-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-dihydroxytricyclo[3.3.1.13,7]dec-1-yl ester, polymer with 2-ethyltricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate and 7-oxo-6-oxabicyclo[3.2.1]oct-4-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 335163-70-7

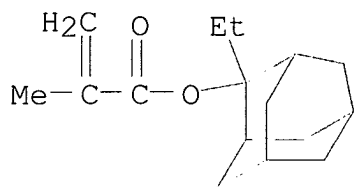
CMF C11 H14 O4



CM 2

CRN 209982-56-9

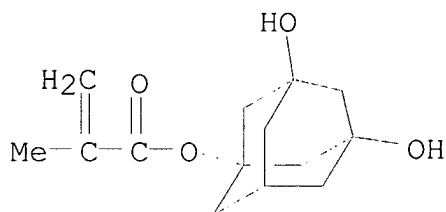
CMF C16 H24 O2



CM 3

CRN 115522-15-1

CMF C14 H20 O4



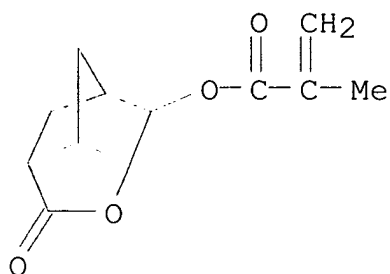
RN 405509-19-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl ester, polymer with 3-hydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl 2-propenoate and octahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-6-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 254900-07-7

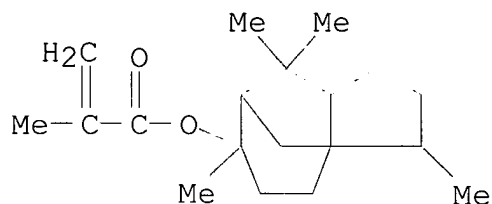
CMF C12 H14 O4



CM 2

CRN 239096-10-7

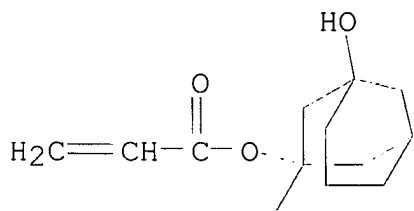
CMF C19 H30 O2



CM 3

CRN 216581-76-9

CMF C13 H18 O3



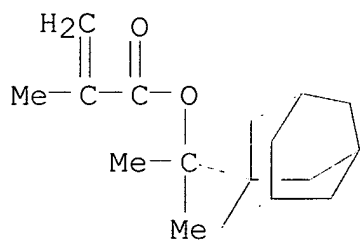
RN 482609-97-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-dihydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl ester, polymer with hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-propenoate and 1-methyl-1-tricyclo[3.3.1.1^{3,7}]dec-1-ylethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 279218-76-7

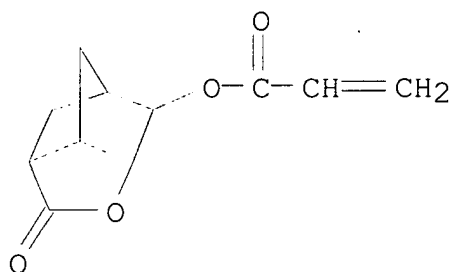
CMF C17 H26 O2



CM 2

CRN 242129-35-7

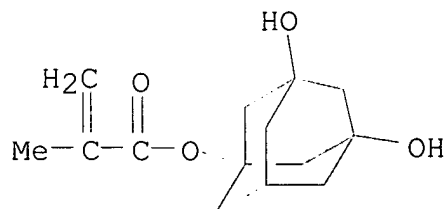
CMF C11 H12 O4



CM 3

CRN 115522-15-1

CMF C14 H20 O4



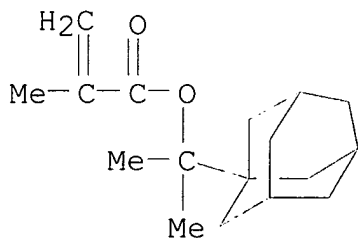
RN 508210-04-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-dihydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl ester, polymer with dihydro-3-methylene-2(3H)-furanone and 1-methyl-1-tricyclo[3.3.1.1^{3,7}]dec-1-ylethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 279218-76-7

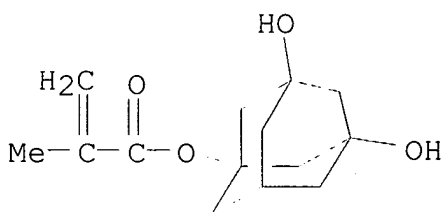
CMF C17 H26 O2



CM 2

CRN 115522-15-1

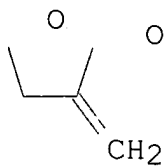
CMF C14 H20 O4



CM 3

CRN 547-65-9

CMF C5 H6 O2



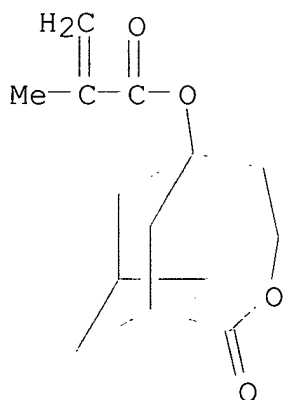
RN 521303-15-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-dihydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl ester, polymer with 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-methyl-2-propenoate and 5-oxo-4-oxatricyclo[4.3.1.1^{3,8}]undec-1-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 348596-87-2

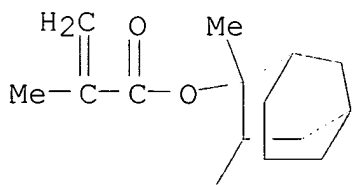
CMF C14 H18 O4



CM 2

CRN 177080-67-0

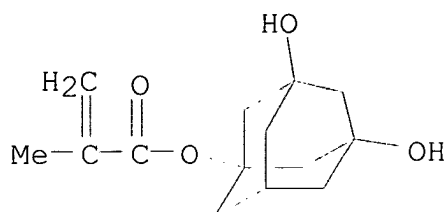
CMF C15 H22 O2



CM 3

CRN 115522-15-1

CMF C14 H20 O4



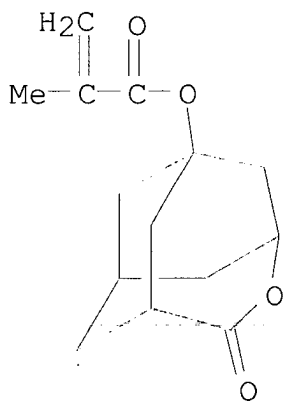
RN 521303-16-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-dihydroxytricyclo[3.3.1.13,7]dec-1-yl ester, polymer with 1-methyl-1-tricyclo[3.3.1.13,7]dec-1-ylethyl 2-methyl-2-propenoate and 5-oxo-4-oxatricyclo[4.3.1.13,8]undec-1-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 348596-87-2

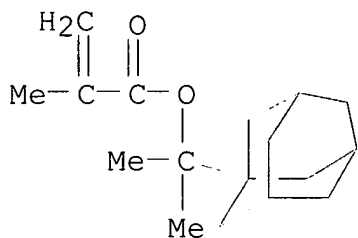
CMF C14 H18 O4



CM 2

CRN 279218-76-7

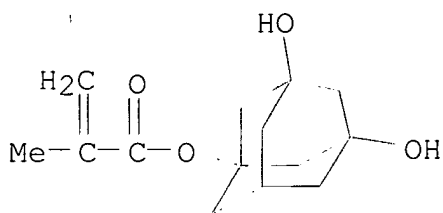
CMF C17 H26 O2



CM 3

CRN 115522-15-1

CMF C14 H20 O4



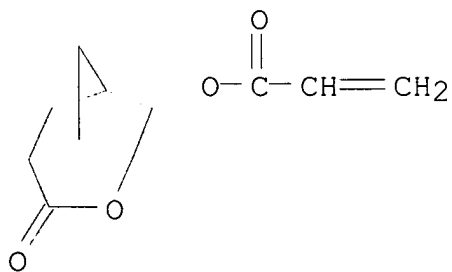
RN 524699-47-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-dihydroxytricyclo[3.3.1.13,7]dec-1-yl ester, polymer with hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-propenoate and 2-methyltricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate (9CI)
(CA INDEX NAME)

CM 1

CRN 242129-35-7

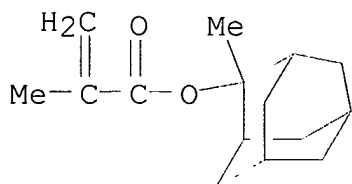
CMF C11 H12 O4



CM 2

CRN 177080-67-0

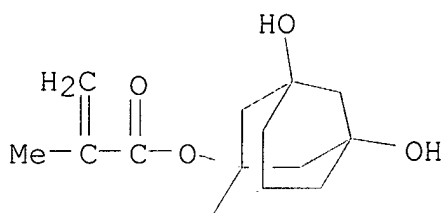
CMF C15 H22 O2



CM 3

CRN 115522-15-1

CMF C14 H20 O4



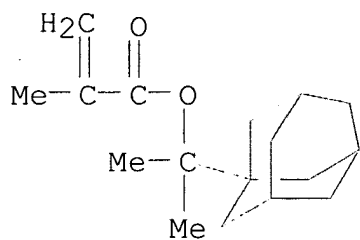
RN 574735-94-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-dihydroxytricyclo[3.3.1.13,7]dec-1-yl ester, polymer with hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-propenoate, 1-methyl-1-tricyclo[3.3.1.13,7]dec-1-ylethyl 2-methyl-2-propenoate and tricyclo[3.3.1.13,7]dec-1-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 279218-76-7

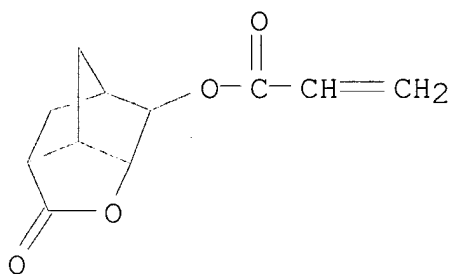
CMF C17 H26 O2



CM 2

CRN 242129-35-7

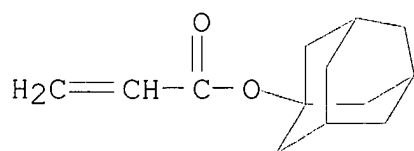
CMF C11 H12 O4



CM 3

CRN 121601-93-2

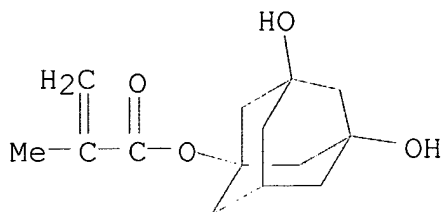
CMF C13 H18 O2



CM 4

CRN 115522-15-1

CMF C14 H20 O4



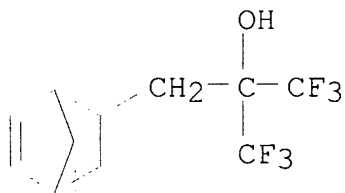
RN 607710-65-6 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2-methyltricyclo[3.3.1.13,7]dec-2-yl ester, polymer with α, α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 196314-61-1

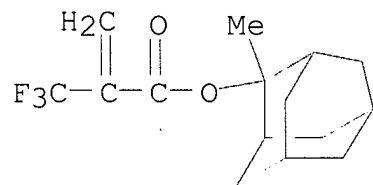
CMF C11 H12 F6 O



CM 2

CRN 188739-86-8

CMF C15 H19 F3 O2



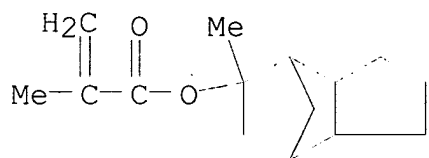
RN 610300-92-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-dihydroxytricyclo[3.3.1.13,7]dec-1-yl ester, polymer with hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-propenoate and octahydro-5-methyl-4,7-methano-1H-inden-5-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 280123-21-9

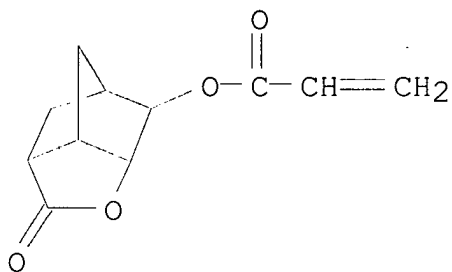
CMF C15 H22 O2



CM 2

CRN 242129-35-7

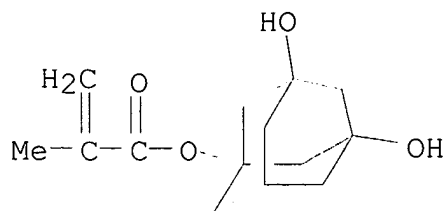
CMF C11 H12 O4



CM 3

CRN 115522-15-1

CMF C14 H20 O4



RN 610301-01-4 HCAPLUS

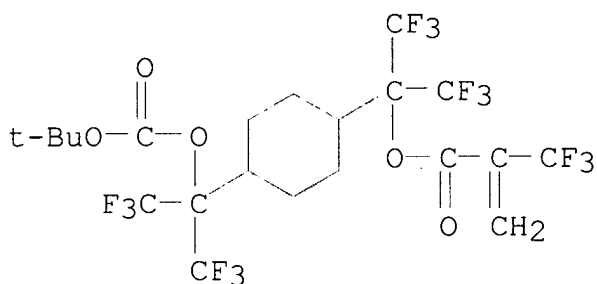
CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1-[4-[1-[[[(1,1-

dimethylethoxy)carbonyl]oxy]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]cyclohexyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 610300-99-7

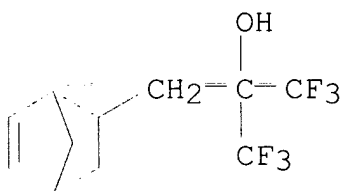
CMF C21 H21 F15 O5



CM 2

CRN 196314-61-1

CMF C11 H12 F6 O



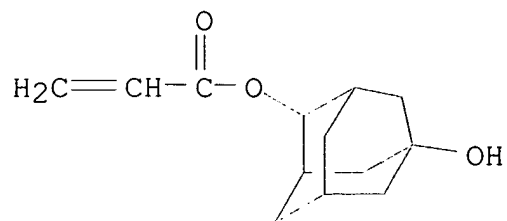
RN 617692-20-3 HCAPLUS

CN 2-Propenoic acid, 5-hydroxytricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with α,α -dimethylbicyclo[2.2.1]hept-5-ene-2-methanol, 2,5-furandione and 1-methyl-1-tricyclo[3.3.1.1^{3,7}]dec-1-ylethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 310411-21-3

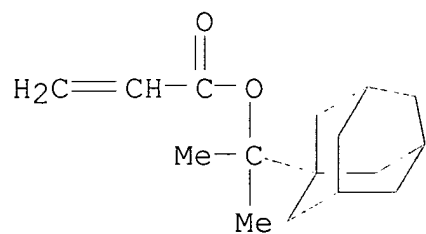
CMF C13 H18 O3



CM 2

CRN 300833-10-7

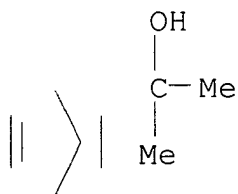
CMF C16 H24 O2



CM 3

CRN 22497-08-1

CMF C10 H16 O



CM 4

CRN 108-31-6

CMF C4 H2 O3



IC ICM G03F007-004
ICS C07C381-12; C08F012-14; C08F220-18; C08F220-26; C08F232-04;
C09K003-00; G03F007-038; G03F007-039; H01L021-027

CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)

ST amide linkage contg sulfonium salt **photoacid** generator
resist; sulfonamide linkage contg sulfonium salt **photoacid**
generator resist

IT 109-92-2DP, Ethyl vinyl ether, reaction products with
poly(hydroxystyrene) 129674-22-2P 143336-94-1P
159296-87-4P 177034-73-0P 177034-75-2P 199432-82-1P
200808-68-0P 228101-60-8P 250378-10-0P, Butyrolactone
methacrylate-2-ethyl-2-adamantyl methacrylate copolymer
288620-13-3P 288620-15-5P 289623-64-9P 289706-85-0P
312620-54-5P 325143-38-2P 326591-96-2P
359635-35-1P 366808-82-4P **370866-39-0P** 372968-15-5P
391232-36-3P **398140-38-0P 398140-43-7P**
398140-45-9P 398140-57-3P 398140-59-5P 398140-68-6P
398140-69-7P 398140-77-7P 398140-80-2P **405509-19-5P**
406702-00-9P 430437-18-6P 459418-30-5P **482609-97-2P**
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594855-58-0P **607710-65-6P** 607710-66-7P 607710-67-8P
607710-68-9P 607710-69-0P 607710-70-3P 607710-71-4P
607710-72-5P 607710-73-6P 607710-76-9P 607710-77-0P
610300-92-0P 610300-96-4P 610300-97-5P 610300-98-6P
610301-00-3P **610301-01-4P** 610301-03-6P 610301-04-7P
610301-05-8P 615278-35-8P **617692-20-3P**

(preparation of sulfonium compds. having amide or sulfonamide
linkage as radiation-sensitive acid generators and
resist compns. containing them)

L60 ANSWER 25 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:834248 HCAPLUS

DOCUMENT NUMBER: 139:330330

TITLE: Chemically amplified photoresist compositions
with high sensitivity and resolution

INVENTOR(S): Kodama, Kunihiro

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 63 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003302754	A2	20031024	JP 2002-110738	2002 0412

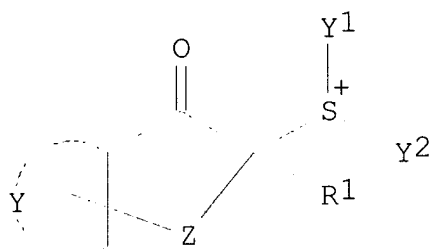
PRIORITY APPLN. INFO.:

JP 2002-110738

2002
0412

OTHER SOURCE(S):
GI

MARPAT 139:330330



X⁻

I

AB The resist compns., useful for excimer laser development, contain **photoacid** generators I (R1 = H, alkyl, aryl, cyano; Y1, Y2 = alkyl, aryl, aralkyl, heteroring; Y = condensed aromatic group, heteroring; Z = single bond, divalent linking group; X⁻ = nonnucleophilic anion).

IT 159296-87-4P 200808-68-0P 312620-54-5P
325143-38-2P 391613-77-7P 398140-38-0P
398140-43-7P 398140-45-9P 405509-19-5P
482609-97-2P 508210-04-6P 521303-15-1P
521303-16-2P 524699-47-6P 574735-94-7P
607710-65-6P 610300-92-0P 610301-01-4P
615278-38-1P

(sulfonium-based **photoacid** generators for excimer laser-sensitive **photoresists** with high sensitivity and resolution)

RN 159296-87-4 HCAPLUS

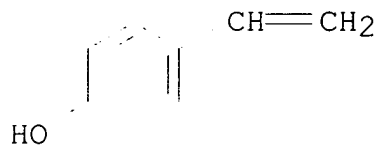
CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with

4-ethenylphenol (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

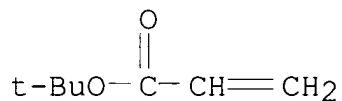
CMF C8 H8 O



CM 2

CRN 1663-39-4

CMF C7 H12 O2



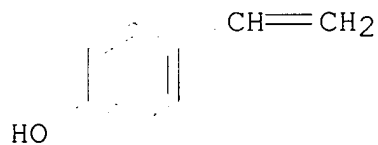
RN 200808-68-0 HCAPLUS

CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with ethenylbenzene and 4-ethenylphenol (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

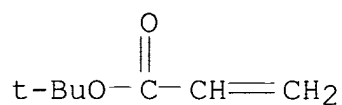
CMF C8 H8 O



CM 2

CRN 1663-39-4

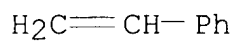
CMF C7 H12 O2



CM 3

CRN 100-42-5

CMF C8 H8



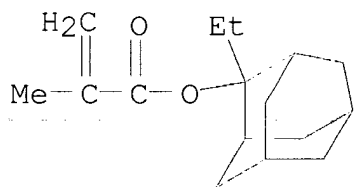
RN 312620-54-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyltricyclo[3.3.1.1^{3,7}]dec-2-yl
 ester, polymer with 3-hydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl
 2-methyl-2-propenoate and tetrahydro-4,4-dimethyl-2-oxo-3-furanyl
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 209982-56-9

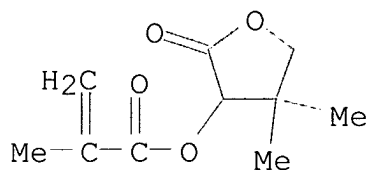
CMF C16 H24 O2



CM 2

CRN 156938-13-5

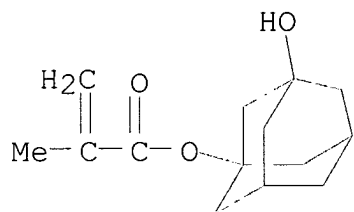
CMF C10 H14 O4



CM 3

CRN 115372-36-6

CMF C14 H20 O3



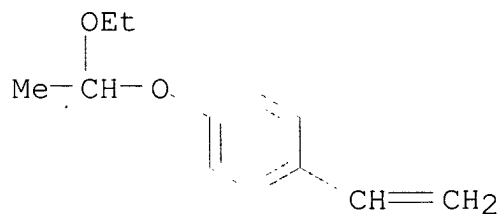
RN 325143-38-2 HCAPLUS

CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with
1-ethenyl-4-(1-ethoxyethoxy)benzene and 4-ethenylphenol (9CI) (CA
INDEX NAME)

CM 1

CRN 157057-20-0

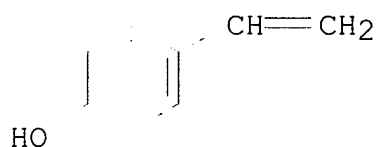
CMF C12 H16 O2



CM 2

CRN 2628-17-3

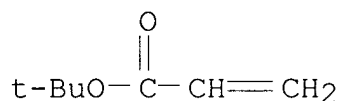
CMF C8 H8 O



CM 3

CRN 1663-39-4

CMF C7 H12 O2



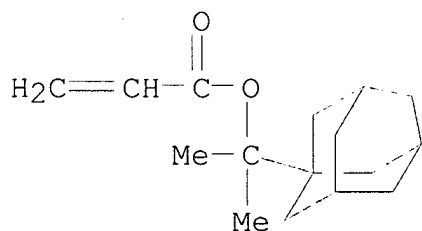
RN 391613-77-7 HCAPLUS

CN 2-Propenoic acid, 3-hydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl ester, polymer with α,α -dimethylbicyclo[2.2.1]hept-5-ene-2-methanol, 2,5-furandione and 1-methyl-1-tricyclo[3.3.1.1^{3,7}]dec-1-ylethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 300833-10-7

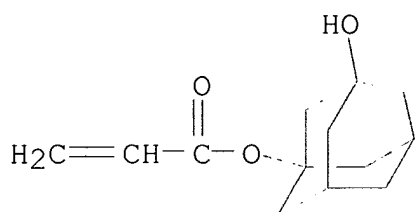
CMF C16 H24 O2



CM 2

CRN 216581-76-9

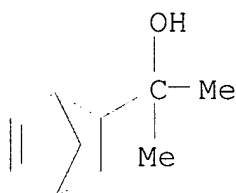
CMF C13 H18 O3



CM 3

CRN 22497-08-1

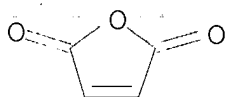
CMF C10 H16 O



CM 4

CRN 108-31-6

CMF C4 H2 O3



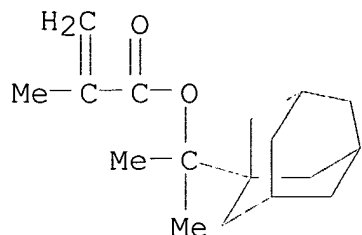
RN 398140-38-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-hydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl
 ester, polymer with 1-methyl-1-tricyclo[3.3.1.1^{3,7}]dec-1-ylethyl
 2-methyl-2-propenoate and tetrahydro-5-oxo-3-furanyl
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 279218-76-7

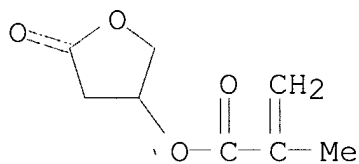
CMF C17 H26 O2



CM 2

CRN 130224-95-2

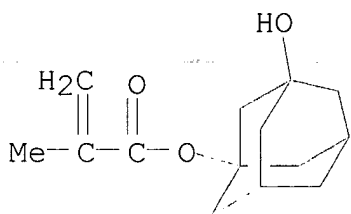
CMF C8 H10 O4



CM 3

CRN 115372-36-6

CMF C14 H20 O3



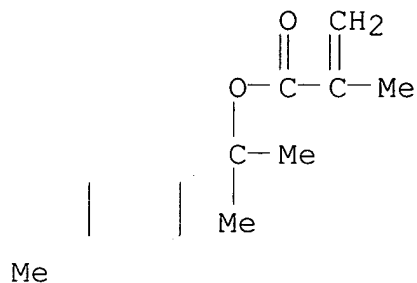
RN 398140-43-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl ester, polymer with 3-hydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl 2-methyl-2-propenoate and 1-methyl-1-(4-methylcyclohexyl)ethyl 2-methyl-2-propenoate (9CI).
(CA INDEX NAME)

CM 1

CRN 351196-10-6

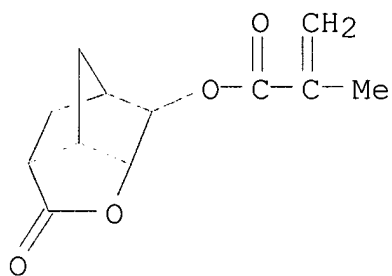
CMF C14 H24 O2



CM 2

CRN 254900-07-7

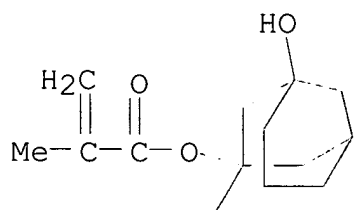
CMF C12 H14 O4



CM 3

CRN 115372-36-6

CMF C14 H20 O3



RN 398140-45-9 HCAPLUS

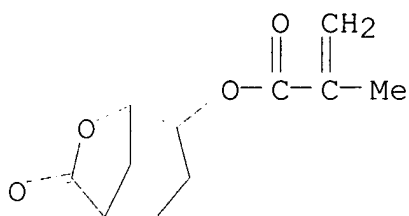
CN 2-Propenoic acid, 2-methyl-, 3,5-dihydroxytricyclo[3.3.1.13,7]dec-1-yl ester, polymer with 2-ethyltricyclo[3.3.1.13,7]dec-2-yl

2-methyl-2-propenoate and 7-oxo-6-oxabicyclo[3.2.1]oct-4-yl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 335163-70-7

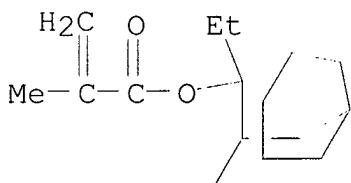
CMF C11 H14 O4



CM 2

CRN 209982-56-9

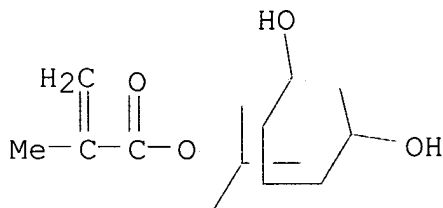
CMF C16 H24 O2



CM 3

CRN 115522-15-1

CMF C14 H20 O4



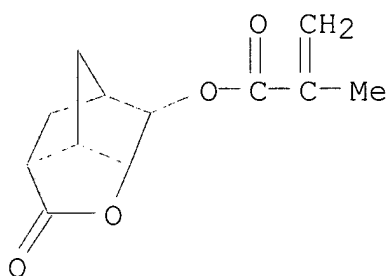
RN 405509-19-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl ester, polymer with 3-hydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl 2-propenoate and octahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-6-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 254900-07-7

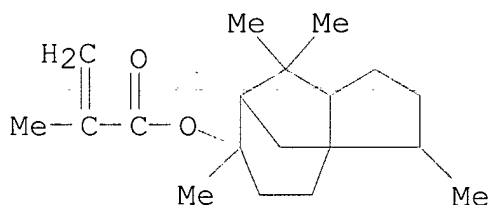
CMF C12 H14 O4



CM 2

CRN 239096-10-7

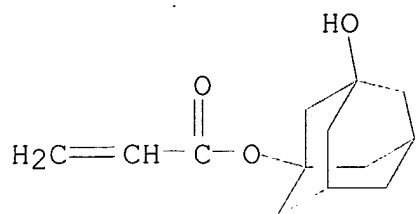
CMF C19 H30 O2



CM 3

CRN 216581-76-9

CMF C13 H18 O3



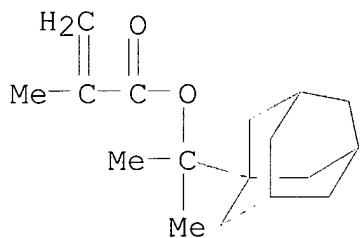
RN 482609-97-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-dihydroxytricyclo[3.3.1.13,7]dec-1-yl ester, polymer with hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-propenoate and 1-methyl-1-tricyclo[3.3.1.13,7]dec-1-ylethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 279218-76-7

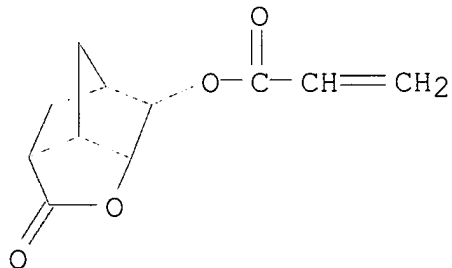
CMF C17 H26 O2



CM 2

CRN 242129-35-7

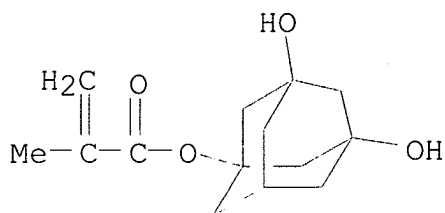
CMF C11 H12 O4



CM 3

CRN 115522-15-1

CMF C14 H20 O4



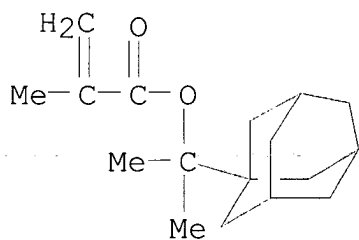
RN 508210-04-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-dihydroxytricyclo[3.3.1.13,7]dec-1-yl ester, polymer with dihydro-3-methylene-2(3H)-furanone and 1-methyl-1-tricyclo[3.3.1.13,7]dec-1-ylethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 279218-76-7

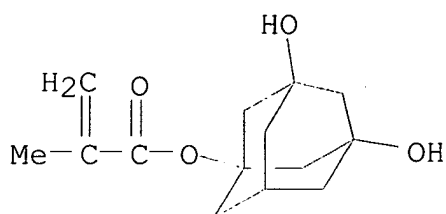
CMF C17 H26 O2



CM 2

CRN 115522-15-1

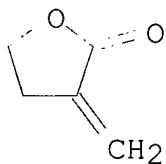
CMF C14 H20 O4



CM 3

CRN 547-65-9

CMF C5 H6 O2



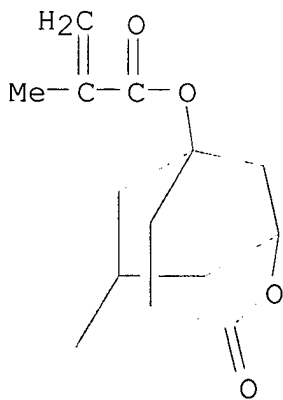
RN 521303-15-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-dihydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl ester, polymer with 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-methyl-2-propenoate and 5-oxo-4-oxatricyclo[4.3.1.1^{3,8}]undec-1-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 348596-87-2

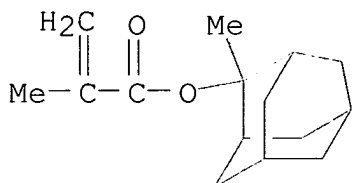
CMF C14 H18 O4



CM 2

CRN 177080-67-0

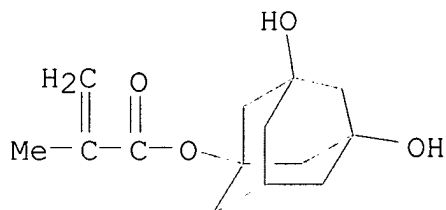
CMF C15 H22 O2



CM 3

CRN 115522-15-1

CMF C14 H20 O4



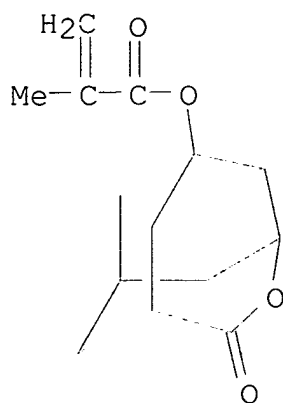
RN 521303-16-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-dihydroxytricyclo[3.3.1.13,7]dec-1-yl ester, polymer with 1-methyl-1-tricyclo[3.3.1.13,7]dec-1-ylethyl 2-methyl-2-propenoate and 5-oxo-4-oxatrimethylene[4.3.1.13,8]undec-1-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 348596-87-2

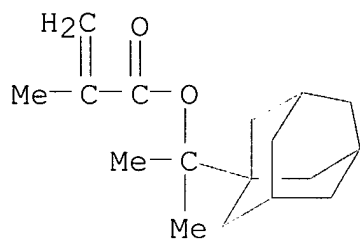
CMF C14 H18 O4



CM 2

CRN 279218-76-7

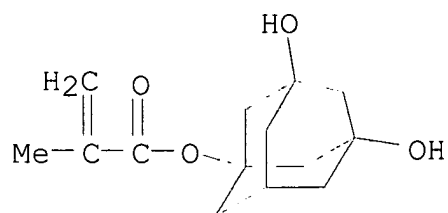
CMF C17 H26 O2



CM 3

CRN 115522-15-1

CMF C14 H20 O4



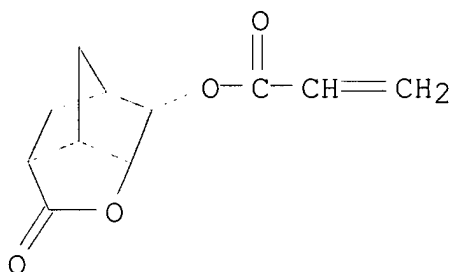
RN 524699-47-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-dihydroxytricyclo[3.3.1.1^{3,7}]dec-

CM 1

CRN 242129-35-7

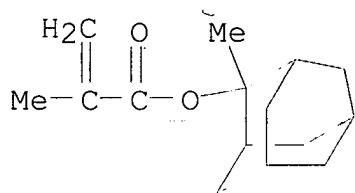
CMF C11 H12 O4



CM 2

CRN 177080-67-0

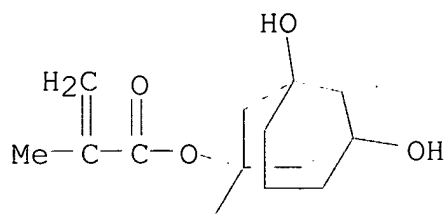
CMF C15 H22 O2



CM 3

CRN 115522-15-1

CMF C14 H20 O4



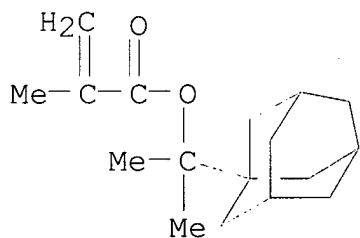
RN 574735-94-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-dihydroxytricyclo[3.3.1.13,7]dec-1-yl ester, polymer with hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-propenoate, 1-methyl-1-tricyclo[3.3.1.13,7]dec-1-ylethyl 2-methyl-2-propenoate and tricyclo[3.3.1.13,7]dec-1-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 279218-76-7

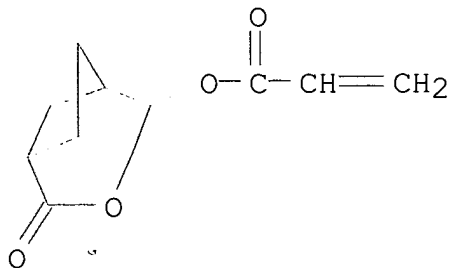
CMF C17 H26 O2



CM 2

CRN 242129-35-7

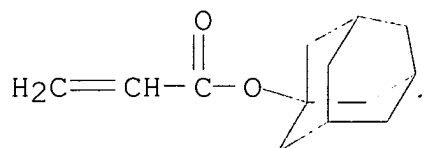
CMF C11 H12 O4



CM 3

CRN 121601-93-2

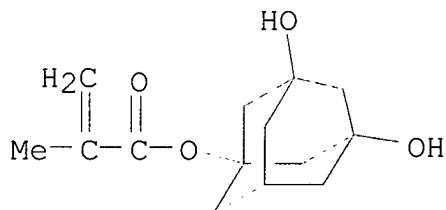
CMF C13 H18 O2



CM 4

CRN 115522-15-1

CMF C14 H20 O4



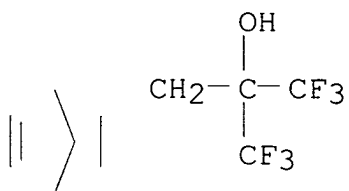
RN 607710-65-6 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2-methyltricyclo[3.3.1.1.3]dec-2-yl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 196314-61-1

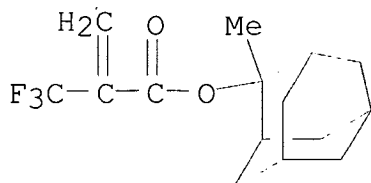
CMF C11 H12 F6 O



CM 2

CRN 188739-86-8

CMF C15 H19 F3 O2



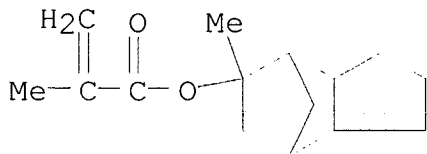
RN 610300-92-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-dihydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl ester, polymer with hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-propenoate and octahydro-5-methyl-4,7-methano-1H-inden-5-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 280123-21-9

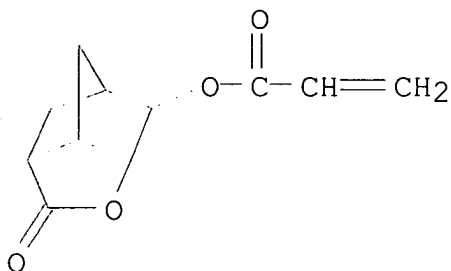
CMF C15 H22 O2



CM 2

CRN 242129-35-7

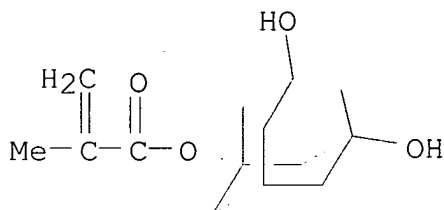
CMF C11 H12 O4



CM 3

CRN 115522-15-1

CMF C14 H20 O4



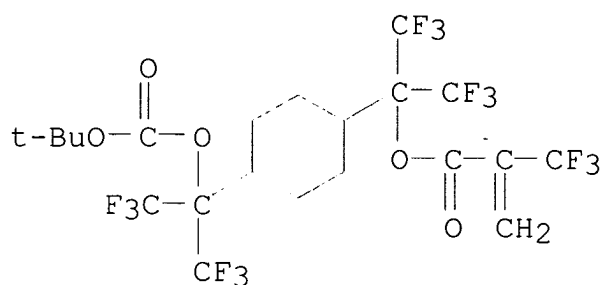
RN 610301-01-4 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1-[4-[1-[(1,1-dimethylethoxy)carbonyl]oxy]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]cyclohexyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 610300-99-7

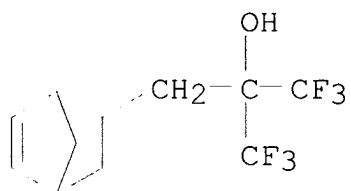
CMF C21 H21 F15 O5



CM 2

CRN 196314-61-1

CMF C11 H12 F6 O



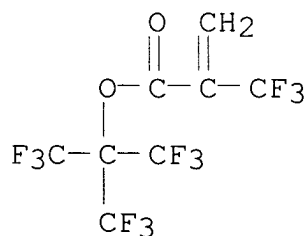
RN 615278-38-1 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2,2,2-trifluoro-1,1-bis(trifluoromethyl)ethyl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 615278-37-0

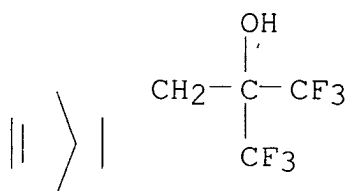
CMF C8 H2 F12 O2



CM 2

CRN 196314-61-1

CMF C11 H12 F6 O



- IC ICM G03F007-004
ICS G03F007-038; G03F007-039; H01L021-027
- CC 74-5 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
- ST photoresist excimer laser sensitivity **photoacid** generator; chem amplification photoresist resolu sulfonium PAG
- IT Sulfonium compounds
(arene, **photoacid** generators; sulfonium-based **photoacid** generators for excimer laser-sensitive photoresists with high sensitivity and resolution)
- IT Aromatic compounds
(sulfonium, **photoacid** generators; sulfonium-based **photoacid** generators for excimer laser-sensitive photoresists with high sensitivity and resolution)
- IT Photoresists
(sulfonium-based **photoacid** generators for excimer laser-sensitive photoresists with high sensitivity and resolution)
- IT 24979-70-2, p-Hydroxystyrene homopolymer
(VP 5000, VP 8000; sulfonium-based **photoacid** generators for excimer laser-sensitive photoresists with high sensitivity and resolution)
- IT 141-07-1 3089-11-0 4356-60-9 17464-88-9 161679-94-3
162846-57-3 162846-59-5 185502-14-1
(crosslinker; sulfonium-based **photoacid** generators for excimer laser-sensitive photoresists with high sensitivity and resolution)
- IT 615277-73-1 615277-76-4 615277-79-7 615277-81-1
615277-83-3 615277-86-6 615277-87-7 615277-90-2
615277-92-4 615277-95-7 615277-98-0 615278-00-7
615278-02-9 615278-05-2 615278-08-5 615278-11-0
615278-14-3 615278-17-6 615278-20-1 615278-23-4
615278-26-7 615278-29-0 615278-32-5
(**photoacid** generator; sulfonium-based **photoacid** generators for excimer laser-sensitive

- photoresists with high sensitivity and resolution)
- IT 615277-70-8P
(**photoacid** generator; sulfonium-based
photoacid generators for excimer laser-sensitive
photoresists with high sensitivity and resolution)
- IT 615277-67-3P
(sulfonium-based **photoacid** generators for excimer
laser-sensitive photoresists with high sensitivity and resolution)
- IT 109-92-2DP, Ethyl vinyl ether, ethers with hydroxystyrene
homopolymer 24979-70-2DP, VP 15000, ethers with Et vinyl ether
129674-22-2P 143336-94-1P **159296-87-4P** 177034-73-0P
177034-75-2P 199432-82-1P **200808-68-0P** 228101-60-8P
250378-10-0P, Butyrolactone methacrylate-2-ethyl-2-adamantyl
methacrylate copolymer 288620-13-3P 288620-15-5P
289623-64-9P 289706-85-0P **312620-54-5P**
325143-38-2P 326591-96-2P 359635-35-1P 366808-82-4P
370102-83-3P 372968-15-5P 391232-36-3P **391613-77-7P**
398140-38-0P **398140-43-7P** **398140-45-9P**
398140-59-5P 398140-68-6P 398140-69-7P 398140-77-7P
398140-80-2P **405509-19-5P** 406702-00-9P 430437-18-6P
459418-30-5P **482609-97-2P** 503003-65-4P
508210-04-6P 515876-73-0P **521303-15-1P**
521303-16-2P **524699-47-6P** **574735-94-7P**
607710-65-6P 607710-66-7P 607710-67-8P 607710-68-9P
607710-69-0P 607710-70-3P 607710-71-4P 607710-72-5P
607710-73-6P 607710-76-9P 607710-77-0P **610300-92-0P**
610300-96-4P 610300-97-5P 610300-98-6P 610301-00-3P
610301-01-4P 610301-03-6P 610301-04-7P 610301-05-8P
615278-33-6P 615278-35-8P **615278-38-1P**
(sulfonium-based **photoacid** generators for excimer
laser-sensitive **photoresists** with high sensitivity
and resolution)
- IT 75-77-4, Chlorotrimethylsilane, reactions 1600-44-8,
Tetramethylenesulfoxide 54784-07-5
(sulfonium-based **photoacid** generators for excimer
laser-sensitive photoresists with high sensitivity and resolution)
- IT 24979-69-9, Phenol, 3-ethenyl-, homopolymer 185405-14-5
321164-59-4 345212-27-3
(sulfonium-based **photoacid** generators for excimer
laser-sensitive photoresists with high sensitivity and resolution)

L60 ANSWER 26 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:658731 HCAPLUS
DOCUMENT NUMBER: 140:33569
TITLE: F2 resist based on methacrylonitrile/2-
trifluoromethylacrylate copolymers
AUTHOR(S): Shirai, Masamitsu; Takashiba, Shinichi;
Tsunooka, Masahiro

CORPORATE SOURCE: Department of Applied Chemistry, Graduate
School of Engineering, Osaka Prefecture
University, Osaka, 599-8531, Japan

SOURCE: Journal of Photopolymer Science and Technology
(2003) 16(4), 545-548
CODEN: JSTEOW; ISSN: 0914-9244

PUBLISHER: Technical Association of Photopolymers, Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The synthesis, properties, photochem., outgassing, and etch
resistance of the copolymers of methacrylonitrile and
2-trifluoromethylacrylates were investigated. The copolymers
showed a possibility to use as a pos. single-layer resist for
157nm lithog. Copolymers of 2-methyl-2-adamantyl
2-trifluoromethylacrylate and methacrylonitrile were prepared by the
conventional radical copolymer. The polymer films containing
triphenylsulfonium triflate showed a pos. type profile when
developed after exposure at 146 nm and subsequent baking. This
polymer showed a relatively low etching rate to an oxygen plasma.
The outgassing from this type of polymers was low.

IT **634598-92-8P**
(**photoresist** based on methacrylonitrile-
trifluoromethylacrylate copolymers)

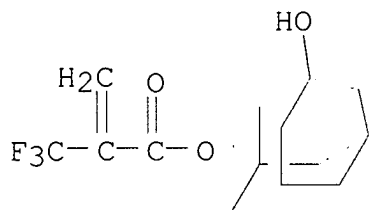
RN 634598-92-8 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 3-
hydroxytricyclo[3.3.1.1^{3,7}]dec-1-yl ester, polymer with
2-methyl-2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

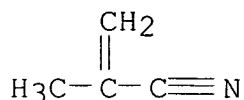
CRN 521913-15-5

CMF C14 H17 F3 O3



CM 2

CRN 126-98-7
CMF C4 H5 N



CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

IT 66003-78-9, Triphenylsulfonium triflate
(**photoacid** generator; photoresist based on
methacrylonitrile-trifluoromethylacrylate copolymers)

IT 607710-69-0P 634598-91-7P **634598-92-8P** 634598-93-9P
(**photoresist** based on methacrylonitrile-
trifluoromethylacrylate copolymers)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L60 ANSWER 27 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:257922 HCAPLUS

DOCUMENT NUMBER: 138:278398

TITLE: Chemically amplified positive photoresists and
polymers having hydroxyalkyl vinyl ether units
therefor

INVENTOR(S): Choi, Sang-Joon

PATENT ASSIGNEE(S): Samsung Electronics Co., Ltd., S. Korea

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
JP 2003096136	A2	20030403	JP 2002-245183	2002 0826
KR 2003017947	A	20030304	KR 2001-51591	2001 0825
DE 10238038	A1	20030522	DE 2002-10238038	2002 0820
US 2003091928	A1	20030515	US 2002-227939	2002

0826

US 6777162
PRIORITY APPLN. INFO.:

B2 20040817

KR 2001-51591

A

2001
0825

AB The polymers consist of (A) unit $[\text{CH}_2\text{CHO}[(\text{CH}_2)_x\text{CR}_1\text{R}_2\text{OH}]]$ [$x = 3-6$; $\text{R}_1, \text{R}_2 = \text{C}_1-20$ alkyl, C_1-10 (per)fluoroalkyl] and (B) acid-labile C_4-20 hydrocarbyl-substituted unit of (meth)acrylate derivs., fumarate derivs., 4-hydroxystyrene derivs., acrylonitrile derivs., and/or norbornene derivs. at A/B (10-90):(10-90) (mol%) and satisfy M_w 3000-50,000. The photoresists contain the polymers and 1.0-15% (based on the polymer weight) PAG (**photoacid** generators). The photoresists show good substrate adhesion and improved annealing effects on exclusion of dynamic volume, and are useful for submicron photolithog.

IT **503445-55-4P 503445-56-5P 503445-57-6P**(chemical amplified pos. **photoresists** containing acid-labile polymers having flexible and hydrophilic backbone)

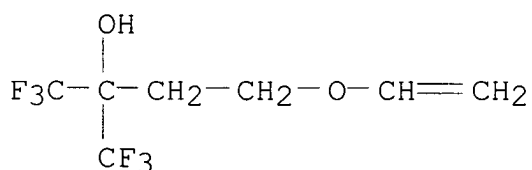
RN 503445-55-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with 4-(ethenyloxy)-1,1,1-trifluoro-2-(trifluoromethyl)-2-butanol (9CI) (CA INDEX NAME)

CM 1

CRN 503445-54-3

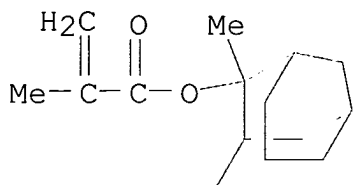
CMF C7 H8 F6 O2



CM 2

CRN 177080-67-0

CMF C15 H22 O2



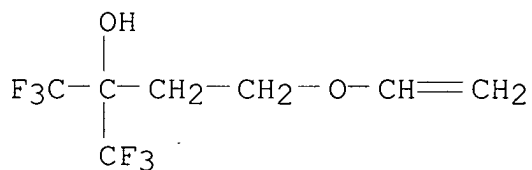
RN 503445-56-5 HCAPLUS

CN 2-Propenoic acid, 5-ethyloctahydro-4,7-methano-1H-inden-5-yl ester, polymer with 4-(ethenyloxy)-1,1,1-trifluoro-2-(trifluoromethyl)-2-butanol (9CI) (CA INDEX NAME)

CM 1

CRN 503445-54-3

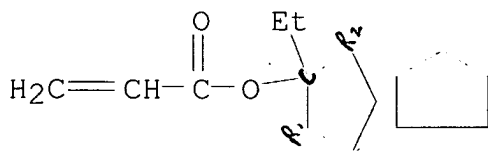
CMF C7 H8 F6 O2



CM 2

CRN 307495-75-6

CMF C15 H22 O2

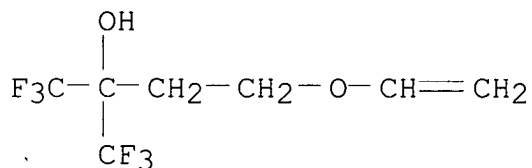


RN 503445-57-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with 4-(ethenyloxy)-1,1,1-trifluoro-2-(trifluoromethyl)-2-butanol and 2,5-furandione (9CI) (CA INDEX NAME)

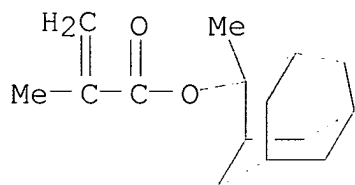
CM 1

CRN 503445-54-3
CMF C7 H8 F6 O2



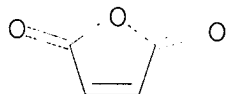
CM 2

CRN 177080-67-0
CMF C15 H22 O2



CM 3

CRN 108-31-6
CMF C4 H2 O3



- IC ICM C08F216-14
ICS C08F220-12; C08F222-00; C08F232-08; G03F007-039; H01L021-027
CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT Onium compounds
(iodonium, diaryl salts, **photoacid** generators; chemical
amplified pos. photoresists containing acid-labile polymers having
flexible and hydrophilic backbone)

- IT Sulfonic acids, uses
(salts, **photoacid** generators; chemical amplified pos.
photoresists containing acid-labile polymers having flexible and
hydrophilic backbone)
- IT Sulfonium compounds
(triaryl salts, **photoacid** generators; chemical amplified
pos. photoresists containing acid-labile polymers having flexible
and hydrophilic backbone)
- IT **503445-55-4P 503445-56-5P 503445-57-6P**
503445-58-7P
(chemical amplified pos. **photoresists** containing acid-labile
polymers having flexible and hydrophilic backbone)
- IT 34684-40-7, N-Hydroxysuccinimide triflate 66003-78-9,
Triphenylsulfonium triflate
(**photoacid** generators; chemical amplified pos.
photoresists containing acid-labile polymers having flexible and
hydrophilic backbone)

L60 ANSWER 28 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:41953 HCAPLUS

DOCUMENT NUMBER: 138:115051

TITLE: Photoresist with reaction anchors for a
chemical amplification of resist patterns for
exposure with 157 nm

INVENTOR(S): Rottstegge, Joerg; Eschbaumer, Christian;
Hohle, Christoph; Herbst, Waltraud; Sebal, Michael

PATENT ASSIGNEE(S): Infineon Technologies A.-G., Germany

SOURCE: Ger. Offen., 8 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
DE 10131670	A1	20030116	DE 2001-10131670	2001 0629
US 2003087182	A1	20030508	US 2002-186657	2002 0701
PRIORITY APPLN. INFO.:			DE 2001-10131670	A 2001 0629

AB The invention relates to a chemical amplified resist comprising a film forming polymer, a **photoacid** generator and a solvent. The film forming polymer contains acid-labile groups and becomes alkaline-soluble upon the reaction with the acid. The film forming polymer comprises polymer structural units, derived from fluoridated monomers, and a group of anchors for the binding of an amplification agent. The transparency of the resist is substantially increased by the fluorination of the polymer structural units with an exposure wave length by 157 nm, so that resist patterns with increased coating thickness can be obtained.

IT **390746-59-5P**, tert-Butyl methacrylate-2-(trifluoromethyl)acrylic acid copolymer
(**photoresist** with reaction anchors for a chemical amplification of **resist** patterns for exposure with 157 nm)

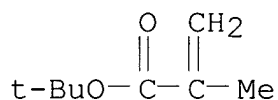
RN 390746-59-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with 2-(trifluoromethyl)-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 585-07-9

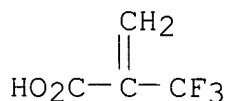
CMF C8 H14 O2



CM 2

CRN 381-98-6

CMF C4 H3 F3 O2



IC ICM G03F007-039

ICS G03F007-38

CC 74-5 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
Section cross-reference(s): 38, 76

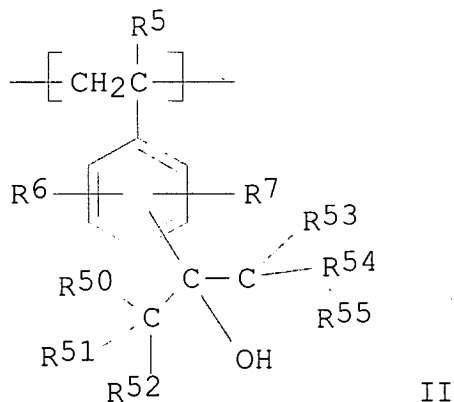
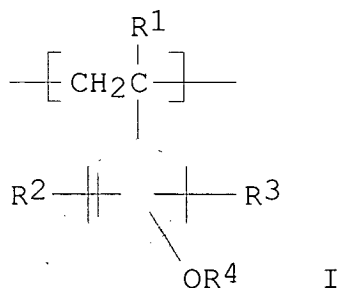
IT **390746-59-5P**, tert-Butyl methacrylate-2-

(trifluoromethyl)acrylic acid copolymer
 (photoresist with reaction anchors for a chemical
 amplification of resist patterns for exposure with
 157 nm)

L60 ANSWER 29 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:35187 HCAPLUS
 DOCUMENT NUMBER: 138:98199
 TITLE: Positive-working vacuum UV-sensitive
 photoresist material composition containing
 specific resin
 INVENTOR(S): Kanna, Shinichi; Mizutani, Kazuyoshi
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 39 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003015298	A2	20030115	JP 2001-202241	2001 0703
PRIORITY APPLN. INFO.:			JP 2001-202241	2001 0703

GI



AB The title composition contains a resin increasing solubility toward an alkali solution by an acid, a **photoacid** generator, and a solvent, wherein the resin contains repeating unit I, II, and
 $[-CH(R17a)-C(R17)(COOR18)-]$ (R1,5,17a,17 = H, halo, cyano, alkyl; R2,3,6,7 = H, halo, cyano, hydroxyl, etc.; R50-55 = H, F, alkyl; R4 = $-C(R11)(R12)(R13)$, $-C(R14)(R15)(-O-R16)$; R18 = $-C(R18d)(R18e)(R18f)$, $-C(R18d)(R18e)-O-(R18g)$; R11-13 = alkyl, cycloalkyl, alkenyl, aralkyl, aryl; R14-15 = H, alkyl; R16 = alkyl, cycloalkyl, aralkyl, aryl). The composition provides the good transparency towards vacuum UV and provides the good solubility contrast towards developers.

IT **485390-66-7P 485390-68-9P 485390-72-5P**

(resin; pos.-working vacuum UV-sensitive **photoresist** material composition containing specific resin)

RN 485390-66-7 HCAPLUS

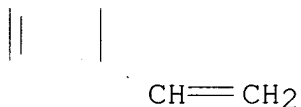
CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with 1-(1,1-dimethylethoxy)-4-ethenylbenzene, 4-ethenyl- α,α -bis(trifluoromethyl)benzenemethanol and 4-(1-methylethenyl)phenol (9CI) (CA INDEX NAME)

CM 1

CRN 95418-58-9

CMF C12 H16 O

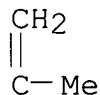
t-BuO



CM 2

CRN 4286-23-1

CMF C9 H10 O

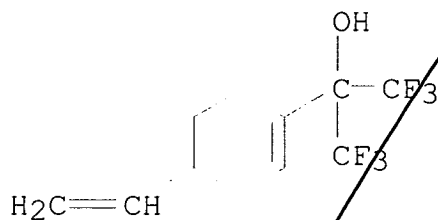


HO

CM 3

CRN 2386-82-5

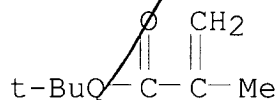
CMF C11 H8 F6 O



CM 4

CRN 585-07-9

CMF C8 H14 O2



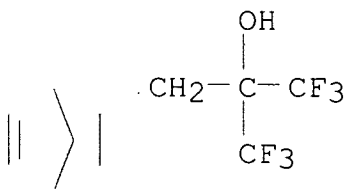
RN 485390-68-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with
 α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol, 1-(1,1-dimethylethoxy)-4-ethenylbenzene and
 4-ethenyl- α,α -bis(trifluoromethyl)benzenemethanol
 (9CI) (CA INDEX NAME)

CM 1

CRN 196314-61-1

CMF C11 H12 F6 O

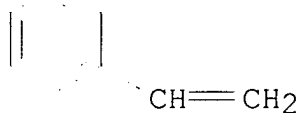


CM 2

CRN 95418-58-9

CMF C12 H16 O

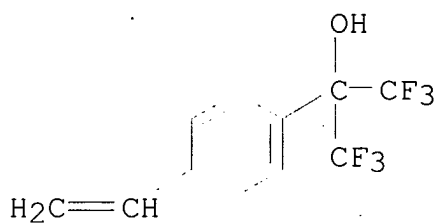
t-BuO



CM 3

CRN 2386-82-5

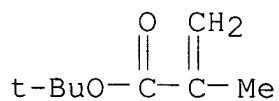
CMF C11 H8 F6 O



CM 4

CRN 585-07-9

CMF C8 H14 O2



RN 485390-72-5 HCAPLUS

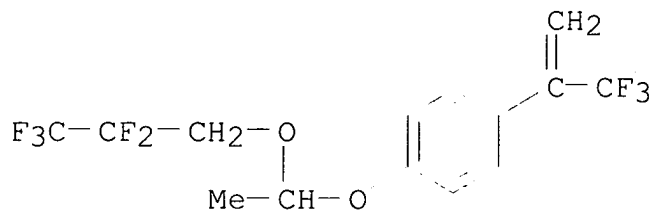
CN 2-Propenoic acid, 2-methyl-, 1-methyl-1-(4-methylcyclohexyl)ethyl ester, polymer with 4-ethenyl- α,α -bis(trifluoromethyl)benzenemethanol, 3-(1-methylethenyl)phenol and 1-[1-(2,2,3,3,3-pentafluoropropoxy)ethoxy]-4-[1-

(trifluoromethyl)ethenyl]benzene (9CI) (CA INDEX NAME)

CM 1

CRN 485390-71-4

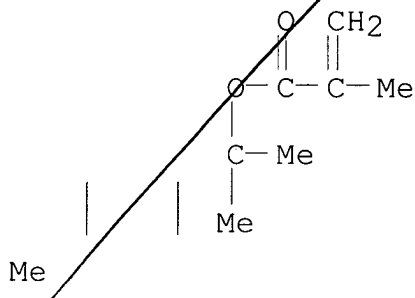
CMF C14 H12 F8 O2



CM 2

CRN 351196-10-6

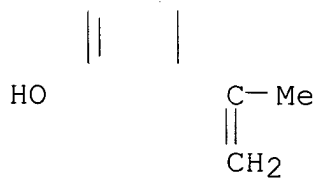
CMF C14 H24 O2



CM 3

CRN 51985-06-9

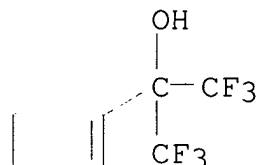
CMF C9 H10 O



CM 4

CRN 2386-82-5

CMF C11 H8 F6 O

H₂C=CH

IC ICM G03F007-039

ICS C08F212-14; C08F220-18; H01L021-027

CC 74-5 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)

Section cross-reference(s): 35

IT 485390-41-8P 485390-42-9P 485390-43-0P 485390-44-1P
 485390-45-2P 485390-46-3P 485390-47-4P 485390-49-6P
 485390-51-0P 485390-52-1P 485390-54-3P 485390-55-4P
 485390-56-5P 485390-57-6P 485390-58-7P 485390-60-1P
 485390-62-3P 485390-63-4P 485390-64-5P 485390-65-6P
485390-66-7P 485390-67-8P **485390-68-9P**
 485390-69-0P 485390-70-3P **485390-72-5P** 485390-73-6P
 485390-76-9P

(resin; pos.-working vacuum UV-sensitive **photoresist**
 material composition containing specific resin)

L60 ANSWER 30 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:799364 HCAPLUS

DOCUMENT NUMBER: 138:376225

TITLE: Advances in resists for 157-nm microlithography

AUTHOR(S): Trinqué, Brian C.; Osborn, Brian Philip;
 Chambers, Charles R.; Hsieh, Yu-Tsai; Corry,
 Schuyler Boon; Chiba, Takashi; Hung, Raymond
 Jui-Pu; Tran, Hoang Vi; Zimmerman, Paul;
 Miller, Daniel; Conley, Will; Willson, C.
 Grant

CORPORATE SOURCE: Dep. Chem. Chem. Eng., Univ. of Texas at
 Austin, Austin, TX, 78712, USA

SOURCE: Proceedings of SPIE-The International Society
 for Optical Engineering (2002), 4690(Pt. 1,
 Advances in Resist Technology and Processing

XIX), 58-68

CODEN: PSISDG; ISSN: 0277-786X

PUBLISHER: SPIE-The International Society for Optical Engineering

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The synthesis and characterization of several new fluoropolymers designed for use in the formulation of photoresists for exposure at 157 nm will be described. The design of these resist platforms is based on learning from previously reported fluorine-containing materials. The authors have continued to explore anionic polymers., free radical polymers., metal-catalyzed addition polymers. and metal-catalyzed copolymers. with carbon monoxide in these studies. The monomers were characterized by vacuum-UV (VUV) spectrometry and polymers characterized by variable angle spectroscopic ellipsometry (VASE). Resist formulations based on these polymers were exposed at the 157 nm wavelength to produce high-resolution images. The synthesis and structures of these new materials and the details of their processing will be presented.

IT **482321-98-2P**

(design. and lithog. characteristics of vacuum-UV chemical amplified **photoresist** formulations based on polymers of fluorinated norbornenes)

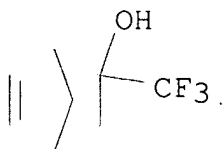
RN 482321-98-2 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with 2-(trifluoromethyl)bicyclo[2.2.1]hept-5-en-2-ol (9CI)
(CA INDEX NAME)

CM 1

CRN 370102-80-0

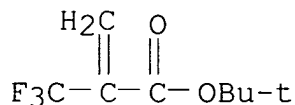
CMF C8 H9 F3 O



CM 2

CRN 105935-24-8

CMF C8 H11 F3 O2



CC 74-1 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes).
Section cross-reference(s): 35, 36

IT **482321-98-2P** 524067-40-1P
(design. and lithog. characteristics of vacuum-UV chemical amplified **photoresist** formulations based on polymers of fluorinated norbornenes)

IT 144317-44-2, Triphenylsulfonium nonaflate
(**photoacid** generator; design. and lithog. characteristics of vacuum-UV chemical amplified photoresist formulations based on polymers of fluorinated norbornenes)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L60 ANSWER 31 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:392163 HCAPLUS

DOCUMENT NUMBER: 136:409023

TITLE: Photoresist compositions comprising
fluoropolymers for DUV photolithography

INVENTOR(S): Lee, Geun Su; Jung, Jae Chang; Jung, Min Ho

PATENT ASSIGNEE(S): Hynix Semiconductor Inc., S. Korea

SOURCE: U.S. Pat. Appl. Publ., 9 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
US 2002061466	A1	20020523	US 2001-35772	2001 1109
US 6686123	B2	20040203		
KR 2002038283	A	20020523	KR 2000-68423	2000 1117
JP 2002169296	A2	20020614	JP 2001-322359	2001 1019

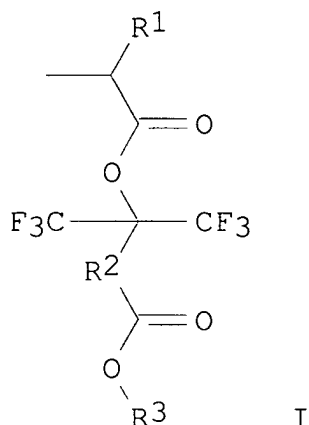
PRIORITY APPLN. INFO.:

KR 2000-68423 A

2000

1117

OTHER SOURCE(S): MARPAT 136:409023
GI



AB Disclosed is photoresist composition comprising monomers and polymers of the following formula I (R1 = H, CH3; R2 = C1-10-alkylene, C1-10-alkylene substituted with C1-10-alkyl, C1-10-alkylene substituted with C1-10-aryl; and R3 = acid labile protecting group., and as further defined in the claims). The photoresist composition has excellent adhesiveness to a wafer, and is developable in aqueous tetramethylammonium hydroxide (TMAH) solution. In addition, the photoresist composition has low absorbance of light having the wavelength of 157 nm, and thus is suitable for a photolithog. process using UV light sources such as VUV (157 nm) and EUV (13 nm) in fabricating a minute circuit for a high integration semiconductor device.

IT **428818-89-7P 428818-90-0P**

(photoresist compns. comprising fluoropolymers for DUV photolithog.)

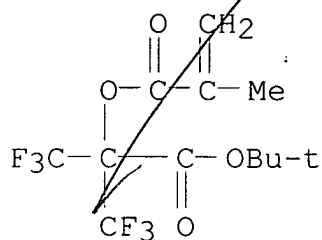
RN 428818-89-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-[(1,1-dimethylethoxy)carbonyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl ester, polymer with 4-[2,2,2-trifluoro-1-(4-hydroxyphenyl)-1-(trifluoromethyl)ethyl]phenyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 428818-87-5

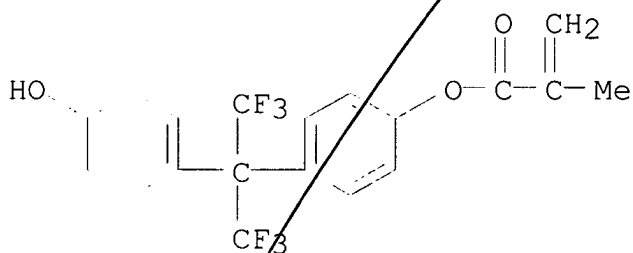
CMF C12 H14 F6 O4



CM 2

CRN 418761-45-2

CMF C19 H14 F6 O3



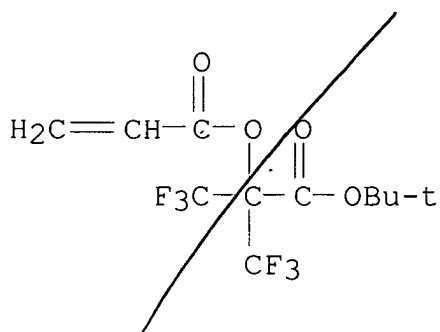
RN 428818-90-0 HCAPLUS

CN 2-Propenoic acid, 1-[(1,1-dimethylethoxy)carbonyl]-2,2,2-trifluoro-1-(trifluoromethyl)ethyl ester, polymer with 4-[2,2,2-trifluoro-1-(4-hydroxyphenyl)-1-(trifluoromethyl)ethyl]phenyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 428818-88-6

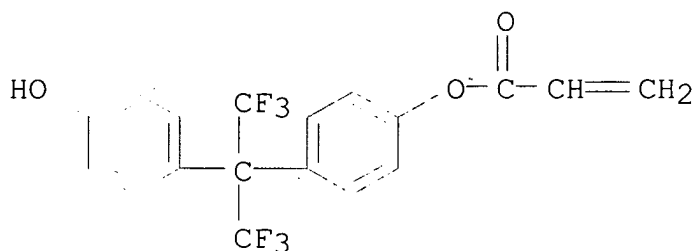
CMF C11 H12 F6 O4



CM 2

CRN 418761-46-3

CMF C18 H12 F6 O3



IC ICM G03F007-038

ICS G03F007-38; G03F007-40; G03F007-20

NCL 430270100

CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 Section cross-reference(s): 38, 76

IT 41580-58-9 66003-78-9, Triphenylsulfonium triflate
 (**photoacid** generator; photoresist compns. comprising
 fluoropolymers for DUV photolithog.)

IT 428818-87-5P 428818-88-6P **428818-89-7P**
428818-90-0P

(**photoresist** compns. comprising fluoropolymers for
 DUV photolithog.)

L60 ANSWER 32 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:392162 HCAPLUS

DOCUMENT NUMBER: 136:409022

TITLE: Positive resist composition

INVENTOR(S): Aoai, Toshiaki; Yasunami, Shoichiro; Mizutani,
 Kazuyoshi; Kanna, Shinichi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: U.S. Pat. Appl. Publ., 56 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
US 2002061464	A1	20020523	US 2001-961281	2001 0925
JP 2002333715	A2	20021122	JP 2001-202298	2001 0703
TW 528931	B	20030421	TW 2001-90123599	2001 0925
PRIORITY APPLN. INFO.:			JP 2000-292537	A 2000 0926
			JP 2000-379284	A 2000 1213
			JP 2001-62158	A 2001 0306
			JP 2001-202298	A 2001 0703

AB The present invention relates to a pos. resist composition comprising:
 (A) a fluorine group-containing resin having at least one fluorine atom on at least one of the main chain and the side chain of the polymer skeleton; and having a group capable of decomposing under the action of an acid to increase the solubility in an alkali developer;
 (B) a compound capable of generating an acid upon irradiation with one of actinic ray and radiation; and (C) a surfactant containing at least one of a silicon atom and a fluorine atom. The present invention provides a pos. photoresist composition suitable for use in the microlithog. process in the production of VLSI or high-capacity microchip, or in other photo-fabrication processes. The invention pos. photoresist composition is capable of forming a highly definite pattern using a vacuum UV ray of < 160 nm.

IT **430437-44-8P 430437-46-0P**(fluorine group-containing resin for pos. **resist** composition)

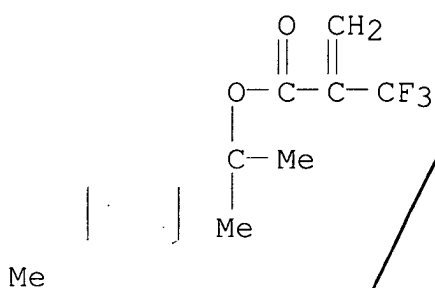
RN 430437-44-8 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1-methyl-1-(4-methylcyclohexyl)ethyl ester, polymer with 4-ethenyl- α,α -bis(trifluoromethyl)benzenemethanol and 3-(1-methylethenyl)phenol (9CI) (CA INDEX NAME)

CM 1

CRN 430437-43-7

CMF C14 H21 F3 O2



CM 2

CRN 51985-06-9

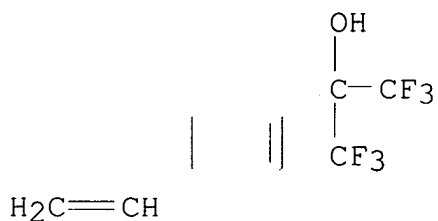
CMF C9 H10 O



CM 3

CRN 2386-82-5

CMF C11 H8 F6 O



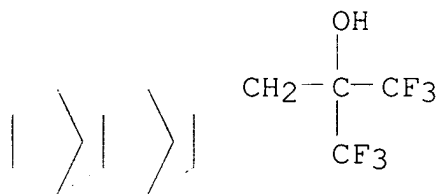
RN 430437-46-0 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 2-methylbicyclo[2.2.1]hept-2-yl ester, polymer with decahydro- α,α -bis(trifluoromethyl)-1,4:5,8-dimethanonaphthalene-2-ethanol and 2,6-difluoro- α,α -bis(trifluoromethyl)-4-[1-(trifluoromethyl)ethenyl]benzenemethanol (9CI) (CA INDEX NAME)

CM 1

CRN 430437-45-9

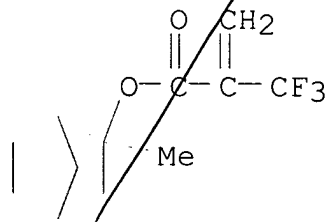
CMF C16 H20 F6 O



CM 2

CRN 430437-41-5

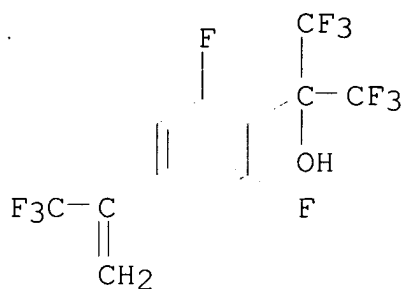
CMF C12 H15 F3 O2



CM 3

CRN 430437-28-8

CMF C12 H5 F11 O



IC ICM G03F007-004

NCL 430270100

CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 Section cross-reference(s): 35, 38, 76

IT 262617-13-0P 430436-66-1P 430436-67-2P 430436-68-3P
 430436-70-7P 430436-72-9P 430436-74-1P 430436-76-3P
 430436-78-5P 430436-79-6P 430436-81-0P 430436-82-1P
 430436-84-3P 430436-85-4P 430436-86-5P 430436-87-6P
 430436-89-8P 430436-90-1P 430436-91-2P 430436-92-3P
 430436-94-5P 430436-95-6P 430436-97-8P 430436-98-9P
 430436-99-0P 430437-01-7P 430437-03-9P 430437-04-0P
 430437-05-1P 430437-07-3P 430437-09-5P 430437-11-9P
 430437-12-0P 430437-13-1P 430437-14-2P 430437-15-3P
 430437-17-5P 430437-18-6P 430437-19-7P 430437-21-1P
 430437-22-2P 430437-24-4P 430437-26-6P 430437-27-7P
 430437-29-9P 430437-30-2P 430437-32-4P 430437-33-5P
 430437-34-6P 430437-35-7P 430437-36-8P 430437-37-9P
 430437-38-0P 430437-39-1P 430437-40-4P 430437-42-6P
430437-44-8P 430437-46-0P 431062-12-3P
 431062-14-5P 431062-16-7P 431062-17-8P 431062-18-9P
 431062-20-3P 431062-22-5P 431062-24-7P 431062-25-8P
 (fluorine group-containing resin for pos. **resist** composition)

IT 144317-44-2, Triphenylsulfonium nonaflate
 (**photoacid** generator; fluorine group-containing pos.
 resist composition containing)

L60 ANSWER 33 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:293992 HCAPLUS

DOCUMENT NUMBER: 136:316936

TITLE: Dissolution inhibitors in photoresist

INVENTOR(S): compositions for microlithography
 Berger, Larry L.; Feldman, Jerald; Petrov,
 Viacheslav Alexandrovich; Schadt, Frank L.,
 III.; Feiring, Andrew F.; Zumsteg, Fredrick
 Claus, Jr.

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: PCT Int. Appl., 35 pp.
 CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002031595	A2	20020418	WO 2001-US42662	2001 1012
WO 2002031595	A3	20021107		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002014632	A5	20020422	AU 2002-14632	2001 1012
EP 1325387	A2	20030709	EP 2001-983184	2001 1012
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004523774	T2	20040805	JP 2002-534922	2001 1012
TW 575788	B	20040211	TW 2001-90125390	2001 1015
PRIORITY APPLN. INFO.:			US 2000-687410	A 2000 1013

US 2001-260759P P
2001
0110

WO 2001-US42662 W
2001
1012

OTHER SOURCE(S): MARPAT 136:316936

AB The invention relates to a photoresist composition comprising (1) a polymeric binder; (2) a photoactive component; and (3) at least one dissoln. inhibitor comprising a paraffinic or cycloparaffinic compound containing at least one functional group having the structure -C(Rf)(Rf')OR (Rf, Rf' = C1-10 fluoroalkyl groups, or taken together are (CF₂)_a, (a = 2-10); R = H, acid labile protecting group). The present invention pertains to fluorine-containing compds. having high UV transparency (particularly at short wavelengths, e.g. 157 nm) which are useful as dissoln. inhibitor.

IT **411224-98-1P**

(binder in **photoresist** compns. for microlithog.)

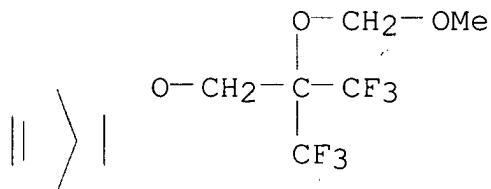
RN 411224-98-1 HCAPLUS

CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with 2-[(bicyclo[2.2.1]hept-5-en-2-yloxy)methyl]-1,1,1,3,3,3-hexafluoro-2-propanol, tetrafluoroethene and 5-[3,3,3-trifluoro-2-(methoxymethoxy)-2-(trifluoromethyl)propoxy]bicyclo[2.2.1]hept-2-ene (9CI) (CA INDEX NAME)

CM 1

CRN 305815-64-9

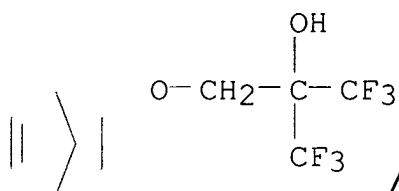
CMF C13 H16 F6 O3



CM 2

CRN 305815-63-8

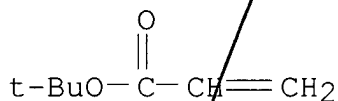
CMF C11 H12 F6 O2



CM 3

CRN 1663-39-4

CMF C7 H12 O2



CM 4

CRN 116-14-3

CMF C2 F4



IC ICM G03F007-00

CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 Section cross-reference(s): 35, 38

IT 411224-97-0P **411224-98-1P**(binder in **photoresist** compns. for microlithog.)

IT 144317-44-2, Triphenylsulfonium nonaflate

(photoacid generator in photoresist compns. for microlithog.)

L60 ANSWER 34 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:185460 HCAPLUS

DOCUMENT NUMBER: 136:254547

TITLE: Novel polymers and photoresist compositions
 comprising electronegative groups

INVENTOR(S): Zampini, Anthony; Szmanda, Charles R.; Cho, Sungseo; Taylor, Gary N.
 PATENT ASSIGNEE(S): Shipley Company, L.L.C., USA
 SOURCE: PCT Int. Appl., 77 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002021216	A2	20020314	WO 2001-US28018	2001 0908
WO 2002021216	A3	20021003		
WO 2002021216	C2	20030403		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001088865	A5	20020322	AU 2001-88865	2001 0908
US 2002058198	A1	20020516	US 2001-948521	2001 0908
US 2002058199	A1	20020516	US 2001-948903	2001 0908
PRIORITY APPLN. INFO.:			US 2000-231274P	P 2000 0908
			US 2000-253118P	P 2000 1127
			WO 2001-US28018	W 2001 0908

AB The present invention includes polymers and photoresist compns. that comprise the polymers as a resin binder component. Photoresists of the invention include chemical-amplified pos.-acting resists that can be effectively imaged at short wavelengths such as sub-200 nm, particularly 157 nm. Particular polymers and photoresists of the invention include at least one electroneg. group that reduces 157 nm absorbance of a wide spectrum of organic groups including aromatic groups such as phenolic moieties.

IT **403814-68-6P 403814-69-7P 403814-70-0P**
403814-71-1P, 4-Hydroxy-2,3,5,6-tetrafluorostyrene-isobornyl methacrylate copolymer **403814-72-2P**,
 tert-Butylmethacrylate-4-Hydroxy-2,3,5,6-tetrafluorostyrene-pentafluorostyrene copolymer **403814-73-3P**
403814-74-4P 403814-75-5P

(novel polymers and **photoresist** compns. comprising electroneg. groups)

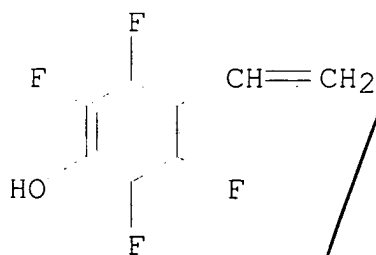
RN 403814-68-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with 4-ethenyl-2,3,5,6-tetrafluorophenol (9CI) (CA INDEX NAME)

CM 1

CRN 385422-30-0

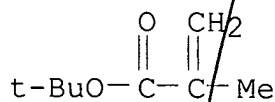
CMF C8 H4 F4 O



CM 2

CRN 585-07-9

CMF C8 H14 O2



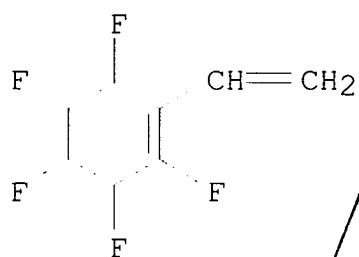
RN 403814-69-7 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, polymer with
ethenylpentafluorobenzene (9CI) (CA INDEX NAME)

CM 1

CRN 653-34-9

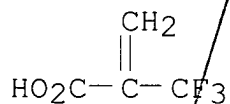
CMF C8 H3 F5



CM 2

CRN 381-98-6

CMF C4 H3 F3 O2



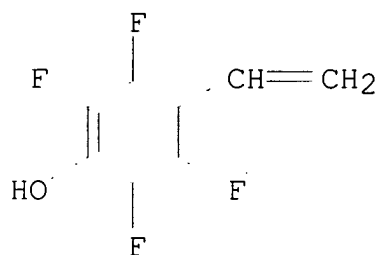
RN 403814-70-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl
ester, polymer with 4-ethenyl-2,3,5,6-tetrafluorophenol (9CI) (CA
INDEX NAME)

CM 1

CRN 385422-30-0

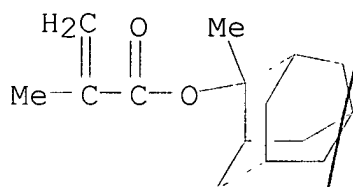
CMF C8 H4 F4 O



CM 2

CRN 177080-67-0

CMF C15 H22 O2



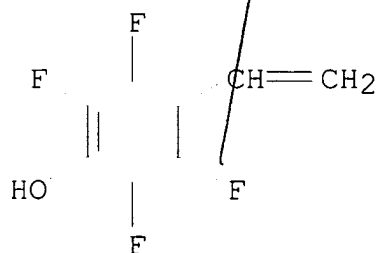
RN 403814-71-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, rel-, polymer with 4-ethenyl-2,3,5,6-tetrafluorophenol (9CI) (CA INDEX NAME)

CM 1

CRN 385422-30-0

CMF C8 H4 F4 O

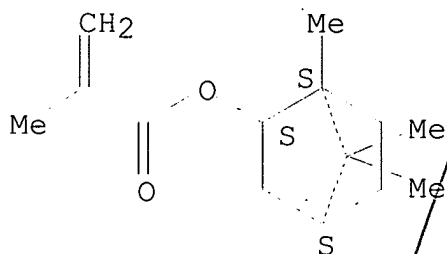


CM 2

CRN 7534-94-3

CMF C14 H22 O2

Relative stereochemistry.



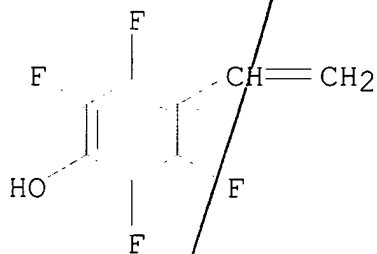
RN 403814-72-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with
ethenylpentafluorobenzene and 4-ethenyl-2,3,5,6-tetrafluorophenol
(9CI) (CA INDEX NAME)

CM 1

CRN 385422-30-0

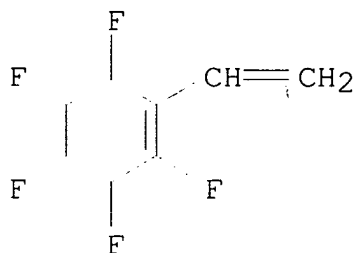
CMF C8 H4 F4 O



CM 2

CRN 653-34-9

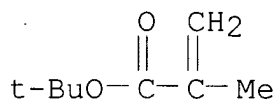
CMF C8 H3 F5



CM 3

CRN 585-07-9

CMF C8 H14 O2



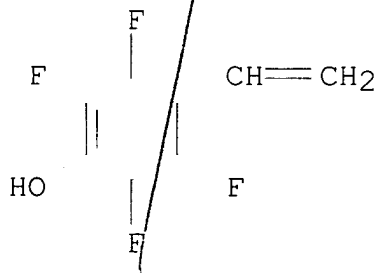
RN 403814-73-3 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, methyl ester, polymer with 4-ethenyl-2,3,5,6-tetrafluorophenol (9CI) (CA INDEX NAME)

CM 1

CRN 385422-30-0

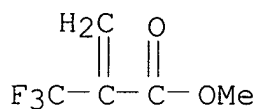
CMF C8 H4 F4 O



CM 2

CRN 382-90-1

CMF C5 H5 F3 O2



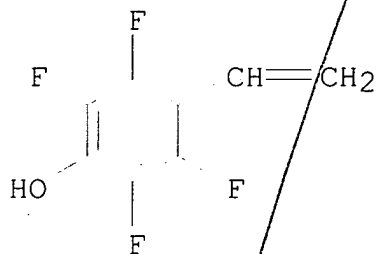
RN 403814-74-4 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with 4-ethenyl-2,3,5,6-tetrafluorophenol (9CI) (CA INDEX NAME)

CM 1

CRN 385422-30-0

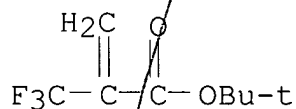
CMF C8 H4 F4 O



CM 2

CRN 105935-24-8

CMF C8 H11 F3 O2



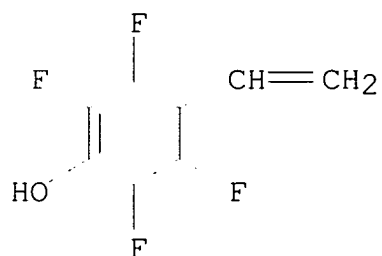
RN 403814-75-5 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with ethenylpentafluorobenzene and 4-ethenyl-2,3,5,6-tetrafluorophenol (9CI) (CA INDEX NAME)

CM 1

CRN 385422-30-0

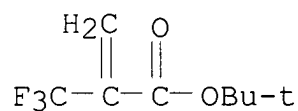
CMF C8 H4 F4 O



CM 2

CRN 105935-24-8

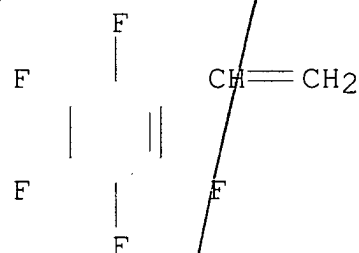
CMF C8 H11 F3 O2



CM 3

CRN 653-34-9

CMF C8 H3 F5



IC ICM G03F007-039

CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38

IT 26838-55-1P, Poly(Pentafluorostyrene) 403814-65-3P
403814-66-4P 403814-67-5P, 4-tert-Butoxy-2,3,5,6-

tetrafluorostyrene-4-Hydroxy-2,3,5,6-tetrafluorostyrene copolymer
403814-68-6P 403814-69-7P 403814-70-0P
403814-71-1P, 4-Hydroxy-2,3,5,6-tetrafluorostyrene-
 isobornyl methacrylate copolymer **403814-72-2P**,
 tert-Butylmethacrylate-4-Hydroxy-2,3,5,6-tetrafluorostyrene-
 pentafluorostyrene copolymer **403814-73-3P**
403814-74-4P 403814-75-5P 403814-76-6P
 403814-77-7P

(novel polymers and **photoresist** compns. comprising
 electroneg. groups)

IT 356058-56-5

(**photoacid**; novel polymers and photoresist compns.
 comprising electroneg. groups)

L60 ANSWER 35 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:185457 HCAPLUS

DOCUMENT NUMBER: 136:239109

TITLE: Novel polymers and photoresist compositions
 for short wavelength imaging

INVENTOR(S): Taylor, Gary N.; Brainard, Robert L.; Yamada,
 Shintaro

PATENT ASSIGNEE(S): Shipley Company, L.L.C., USA

SOURCE: PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002021213	A2	20020314	WO 2001-US28206	

2001

0908

WO 2002021213 A3 20020606

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,
 CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI,
 GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
 KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
 MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG,
 SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA,
 ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE,
 CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
 PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
 MR, NE, SN, TD, TG

AU 2001088952 A5 20020322 AU 2001-88952

US 2002055061

A1

20020509

US 2001-948525

2001
09082001
0908

PRIORITY APPLN. INFO.:

US 2000-231423P

P

2000
0908

US 2000-231473P

P

2000
0908

US 2000-252660P

P

2000
1122

WO 2001-US28206

W

2001
0908

AB This invention relates to resins and photoresist compns. that comprise such resins. This invention includes new resins that comprise **photoacid**-labile deblocking groups, wherein the acid-labile moiety is substituted with one or more electron-withdrawing groups. Polymers of the invention are particularly useful as a resin binder component of chemical-amplified pos.-acting resists that can be effectively imaged at short wavelengths such as sub-300 nm and sub-200 nm and preferably about 157 nm. In such short-wavelength imaging applications resins of the invention exhibit decreased absorbance of short wavelength exposure radiation, such as sub-170 nm radiation e.g. 157 nm.

IT **403610-18-4P**

(novel polymers and **photoresist** compns. for short wavelength imaging)

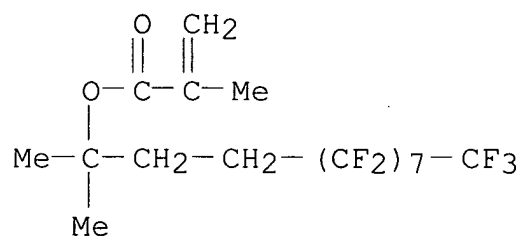
RN 403610-18-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptafluoro-1,1-dimethylundecyl ester, polymer with ethenylpentafluorobenzene and 4-ethenyl-2,3,5,6-tetrafluorophenol (9CI) (CA INDEX NAME)

CM 1

CRN 403610-13-9

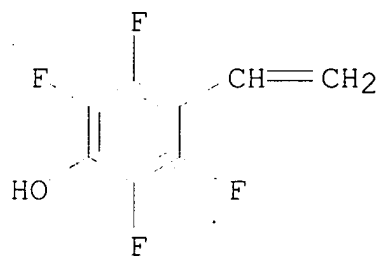
CMF C17 H15 F17 O2



CM 2

CRN 385422-30-0

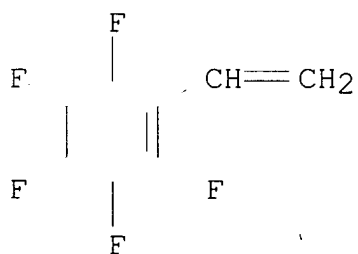
CMF C8 H4 F4 O



CM 3

CRN 653-34-9

CMF C8 H3 F5



IC ICM G03F007-004
 CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 Section cross-reference(s): 35, 38

IT 24979-70-2DP, Poly(4-hydroxystyrene), Acid group-containing, reaction product with fluorocatechol-methylchloroacetate ketal
 403610-17-3P **403610-18-4P**
 (novel polymers and **photoresist** compns. for short wavelength imaging)

L60 ANSWER 36 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:185456 HCAPLUS

DOCUMENT NUMBER: 136:254545

TITLE: Photoresist compositions comprising fluorinated phenolic polymers

INVENTOR(S): Klauck-Jacobs, Axel; Zampini, Anthony; Cho, Sungseo; Yamada, Shintaro

PATENT ASSIGNEE(S): Shipley Company, L.L.C., USA

SOURCE: PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002021212	A2	20020314	WO 2001-US28184	2001 0908
WO 2002021212	A3	20020822		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001087147	A5	20020322	AU 2001-87147	2001 0908
US 2002058198	A1	20020516	US 2001-948521	2001 0908
US 2002058199	A1	20020516	US 2001-948903	2001 0908

PRIORITY APPLN. INFO.:

US 2000-231274P P
2000
0908

US 2000-253118P P
2000
1127

WO 2001-US28184 W
2001
0908

AB The present invention includes polymers and photoresist compns. that comprise the polymers as a resin binder component. Photoresists of the invention contain a polymer that has fluorinated phenolic units and **photoacid**-labile groups. Resists of the invention can be effectively imaged at short wavelengths such as sub-200 nm, particularly 157 nm.

IT **403814-68-6P 403814-69-7P 403814-70-0P**
403814-71-1P 403814-73-3P 403814-74-4P
403814-75-5P

(**photoresist** compns. comprising fluorinated phenolic polymers)

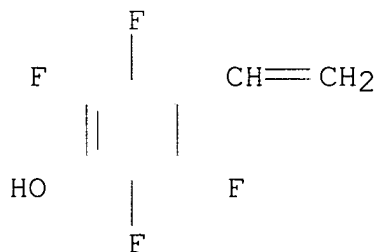
RN 403814-68-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with 4-ethenyl-2,3,5,6-tetrafluorophenol (9CI) (CA INDEX NAME)

CM 1

CRN 385422-30-0

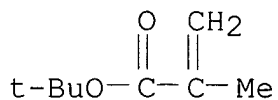
CMF C8 H4 F4 O



CM 2

CRN 585-07-9

CMF C8 H14 O2



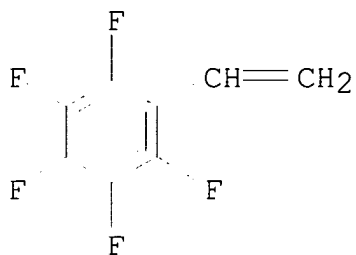
RN 403814-69-7 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, polymer with ethenylpentafluorobenzene (9CI) (CA INDEX NAME)

CM 1

CRN 653-34-9

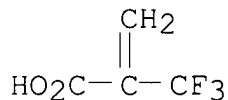
CMF C8 H3 F5



CM 2

CRN 381-98-6

CMF C4 H3 F3 O2



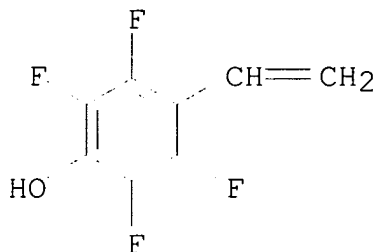
RN 403814-70-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with 4-ethenyl-2,3,5,6-tetrafluorophenol (9CI) (CA INDEX NAME)

CM 1

CRN 385422-30-0

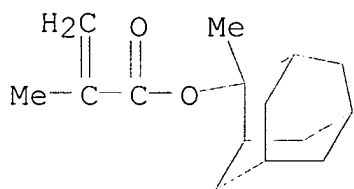
CMF C8 H4 F4 O



CM 2

CRN 177080-67-0

CMF C15 H22 O2



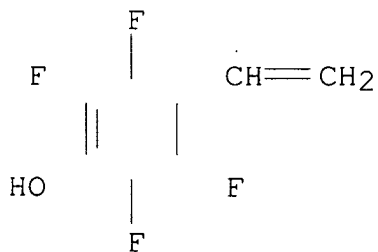
RN 403814-71-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, rel-, polymer with 4-ethenyl-2,3,5,6-tetrafluorophenol (9CI) (CA INDEX NAME)

CM 1

CRN 385422-30-0

CMF C8 H4 F4 O

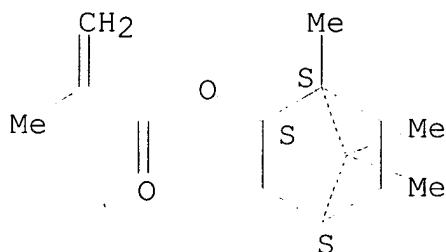


CM 2

CRN 7534-94-3

CMF C14 H22 O2

Relative stereochemistry.



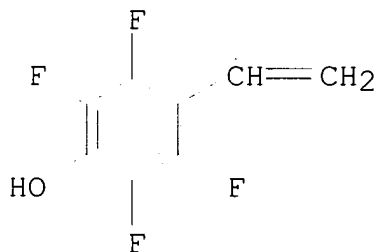
RN 403814-73-3 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, methyl ester, polymer with
4-ethenyl-2,3,5,6-tetrafluorophenol (9CI) (CA INDEX NAME)

CM 1

CRN 385422-30-0

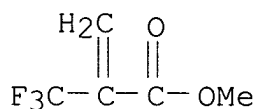
CMF C8 H4 F4 O



CM 2

CRN 382-90-1

CMF C5 H5 F3 O2



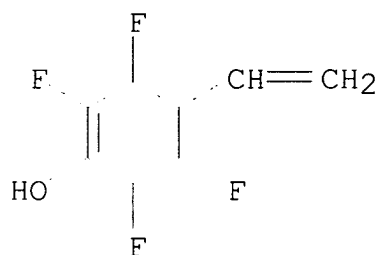
RN 403814-74-4 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with 4-ethenyl-2,3,5,6-tetrafluorophenol (9CI) (CA INDEX NAME)

CM 1

CRN 385422-30-0

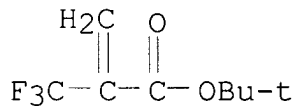
CMF C8 H4 F4 O



CM 2

CRN 105935-24-8

CMF C8 H11 F3 O2



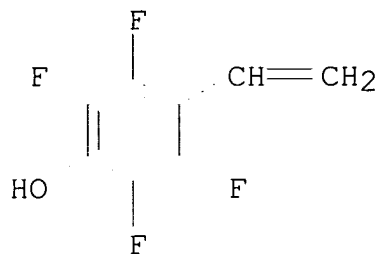
RN 403814-75-5 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with ethenylpentafluorobenzene and 4-ethenyl-2,3,5,6-tetrafluorophenol (9CI) (CA INDEX NAME)

CM 1

CRN 385422-30-0

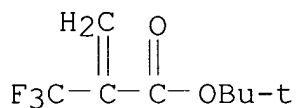
CMF C8 H4 F4 O



CM 2

CRN 105935-24-8

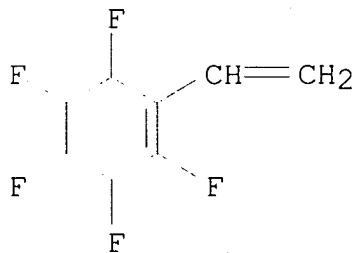
CMF C8 H11 F3 O2



CM 3

CRN 653-34-9

CMF C8 H3 F5



IT 403814-72-2P

(photoresist compns. comprising fluorinated phenolic polymers)

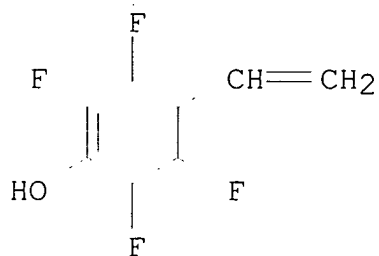
RN 403814-72-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with ethenylpentafluorobenzene and 4-ethenyl-2,3,5,6-tetrafluorophenol (9CI) (CA INDEX NAME)

CM 1

CRN 385422-30-0

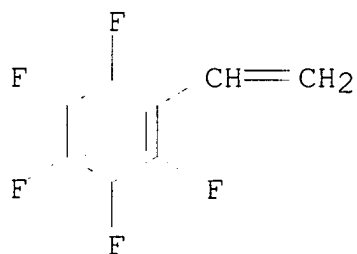
CMF C8 H4 F4 O



CM 2

CRN 653-34-9

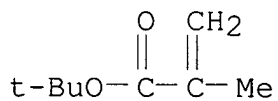
CMF C8 H3 F5



CM 3

CRN 585-07-9

CMF C8 H14 O2



IC ICM G03F007-004

CC 74-5 (Radiation Chemistry, **Photochemistry**, and

Photographic and Other Reprographic Processes)

Section cross-reference(s): 37, 38

IT 100-42-5DP, Styrene, trifluoromethyl derivative, reaction products with 4-acetoxystyrene and t-Bu acrylate 1663-39-4DP, tert-Butyl acrylate, reaction products with 4-acetoxystyrene and trifluoromethyl-substituted styrene 2628-16-2DP, 4-Acetoxystyrene, reaction products with t-Bu acrylate and trifluoromethyl-substituted styrene 3188-13-4DP, Chloromethyl ethyl ether, reaction product with fluorinated phenolic-formaldehyde novolak derivative 24424-99-5DP, Di-tert-butyl dicarbonate, reaction product with fluorinated phenolic-formaldehyde novolak derivative 25512-65-6DP, Dihydropyran, reaction product with fluorinated phenolic-formaldehyde novolak derivative 26838-55-1P, Poly(pentafluorostyrene) 403814-65-3P 403814-66-4P 403814-67-5P **403814-68-6P** **403814-69-7P** **403814-70-0P** **403814-71-1P** **403814-73-3P** **403814-74-4P** **403814-75-5P** 403814-76-6P 403814-77-7P

(**photoresist** compns. comprising fluorinated phenolic polymers)

IT 109-92-2DP, Ethyl vinyl ether, reaction product with fluorinated phenolic-formaldehyde novolak derivs. 37604-40-3P, 3,5-Bis(trifluoromethyl)phenol-formaldehyde copolymer 37702-76-4DP, reaction products with dihydropyran, chloromethyl Et ether, Et vinyl ether and di-t-Bu dicarbonate 37702-76-4P **403814-72-2P**

(**photoresist** compns. comprising fluorinated phenolic polymers)

L60 ANSWER 37 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN.

ACCESSION NUMBER: 2001:918945 HCAPLUS

DOCUMENT NUMBER: 136:45683

TITLE: Radiation-sensitive resin composition for chemical amplified resist

INVENTOR(S): Nishimura, Yukio; Yamahara, Noboru; Yamamoto, Masafumi; Kajita, Toru; Shimokawa, Tsutomu; Ito, Hiroshi

PATENT ASSIGNEE(S): JSR Corporation, Japan; International Business Machines Corporation

SOURCE: Eur. Pat. Appl., 63 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 1164434	A2	20011219	EP 2001-114503	2001 0615
EP 1164434	A3	20041222		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002072484	A2	20020312	JP 2001-108824	2001 0406
US 2002009668	A1	20020124	US 2001-879894	2001 0614
US 6800414	B2	20041005		
SG 100729	A1	20031226	SG 2001-3498	2001 0614
CN 1332205	A	20020123	CN 2001-124927	2001 0615
TW 536661	B	20030611	TW 2001-90114559	2001 0615
US 2004241580	A1	20041202	US 2004-867892	2004 0616
PRIORITY APPLN. INFO.:			JP 2000-182297	A 2000 0616
			JP 2001-108824	A 2001 0406
			US 2001-879894	A1 2001 0614

OTHER SOURCE(S): MARPAT 136:45683

AB A radiation-sensitive resin composition comprising an acid-labile group-containing resin and a **photoacid** generator is disclosed. The resin has a structure of X1R2COR1 (R1 = H, monovalent acid-labile group, C1-6 alkyl which does not have an acid-labile group, C2-7 alkylcarbonyl which does not have an acid-labile group; X1 = C1-4 fluorinated alkyl; and R2 = H, C1-10 alkyl, C1-10 fluorinated alkyl). The resin composition exhibits high transmittance of radiation, high sensitivity, resolution, and pattern shape, and is useful as a chemical amplified resist in producing

semiconductors at a high yield.

IT **380886-66-8P 380886-68-0P 380886-69-1P**

380886-71-5P 380886-81-7P 380886-82-8P

(acid-labile group-containing resin for radiation-sensitive
resist composition)

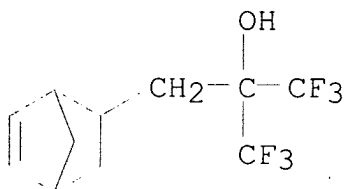
RN 380886-66-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl
ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.
2.1]hept-5-ene-2-ethanol and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 196314-61-1

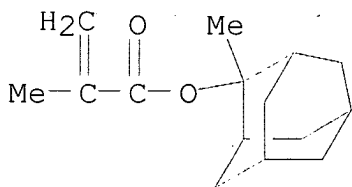
CMF C11 H12 F6 O



CM 2

CRN 177080-67-0

CMF C15 H22 O2



CM 3

CRN 108-31-6

CMF C4 H2 O3



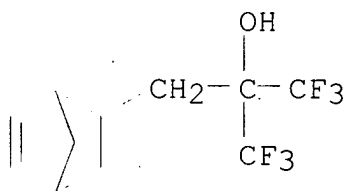
RN 380886-68-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with bicyclo[2.2.1]hept-2-ene, α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 196314-61-1

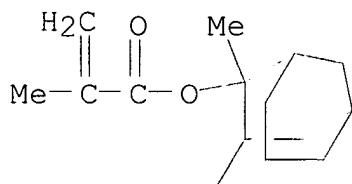
CMF C11 H12 F6 O



CM 2

CRN 177080-67-0

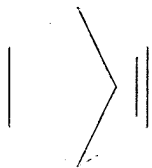
CMF C15 H22 O2



CM 3

CRN 498-66-8

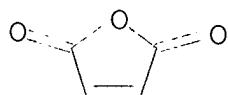
CMF C7 H10



CM 4

CRN 108-31-6

CMF C4 H2 O3



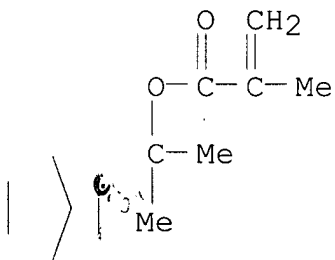
RN 380886-69-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-1-methylethyl ester, polymer with bicyclo[2.2.1]hept-2-ene, α, α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 342014-18-0

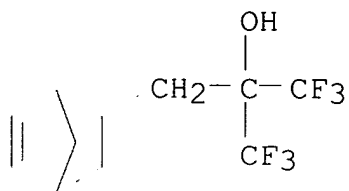
CMF C14 H22 O2



CM 2

CRN 196314-61-1

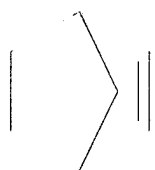
CMF C11 H12 F6 O



CM 3

CRN 498-66-8

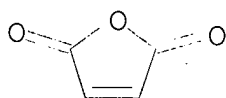
CMF C7 H10



CM 4

CRN 108-31-6

CMF C4 H2 O3



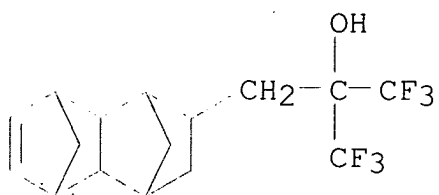
RN 380886-71-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-1-methylethyl ester, polymer with bicyclo[2.2.1]hept-2-ene, 2,5-furandione and 1,2,3,4,4a,5,8,8a-octahydro- α,α -bis(trifluoromethyl)-1,4:5,8-dimethanonaphthalene-2-ethanol (9CI)
(CA INDEX NAME)

CM 1

CRN 365533-00-2

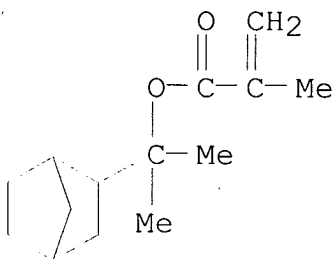
CMF C16 H18 F6 O



CM 2

CRN 342014-18-0

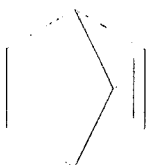
CMF C14 H22 O2



CM 3

CRN 498-66-8

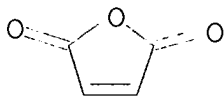
CMF C7 H10



CM 4

CRN 108-31-6

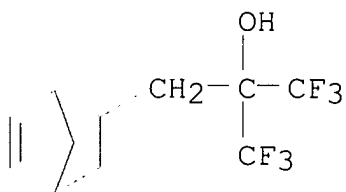
CMF C4 H2 O3



RN 380886-81-7 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

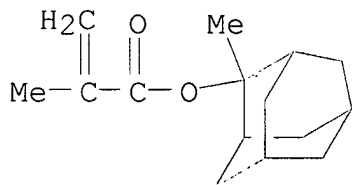
CM 1

CRN 196314-61-1
 CMF C11 H12 F6 O



CM 2

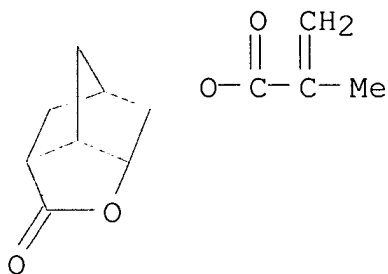
CRN 177080-67-0
 CMF C15 H22 O2



RN 380886-82-8 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl ester, polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol and 2-methyltricyclo[3.3.1.1^{3,7}]dec-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

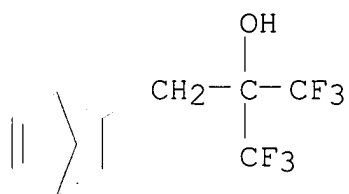
CM 1

CRN 254900-07-7
CMF C12 H14 O4



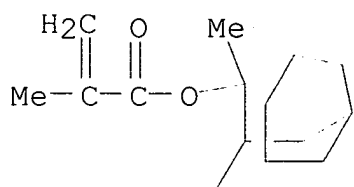
CM 2

CRN 196314-61-1
CMF C11 H12 F6 O



CM 3

CRN 177080-67-0
CMF C15 H22 O2



IC ICM G03F007-004
ICS G03F007-039

CC 74-5 (Radiation Chemistry, **Photochemistry**, and

Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38, 76

IT 370099-14-2P 370102-83-3P 380886-62-4P 380886-63-5P
380886-66-8P 380886-68-0P 380886-69-1P
380886-70-4P **380886-71-5P** 380886-72-6DP, hydrogenated
380886-72-6P 380886-73-7DP, hydrogenated 380886-74-8DP,
hydrogenated 380886-74-8P 380886-75-9DP, hydrogenated
380886-76-0DP, hydrogenated 380886-76-0P 380886-77-1DP,
hydrogenated 380886-78-2P 380886-79-3P 380886-80-6P
380886-81-7P 380886-82-8P 380886-83-9P
380915-67-3P

(acid-labile group-containing resin for radiation-sensitive
resist composition)

L60 ANSWER 38 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:621450 HCAPLUS

DOCUMENT NUMBER: 135:350410

TITLE: Novel fluoropolymers for use in 157 nm
lithographyAUTHOR(S): Ito, H.; Wallraff, G. M.; Fender, N.; Brock,
P. J.; Larson, C. E.; Truong, H. D.; Breyta,
G.; Miller, D. C.; Sherwood, M. H.; Allen, R.
D.CORPORATE SOURCE: IBM Almaden Research Center, San Jose, CA,
95120, USASOURCE: Journal of Photopolymer Science and Technology
(2001), 14(4), 583-594

CODEN: JSTEEW; ISSN: 0914-9244

PUBLISHER: Technical Association of Photopolymers, Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Unexpectedly good UV transmittance at 157 nm of poly(norbornene sulfone) bearing a pendant hexafluoroisopropanol functionality has prompted the authors to employ this fluoroalc. as an acid group for the design of chemical amplification resists for use in 157 nm lithog. The backbone structures to which the hexafluoroalc. group is attached are polynorbornene and polystyrene. Furthermore, the authors discovery that poly(Me α -trifluoromethylacrylate) is adequately transparent at 157 nm has led the authors to incorporate the α -trifluoromethylacrylic unit in the polymer backbone by radical copolymn. with styrenes and norbornenes. Thus, four platforms are currently available to the authors in preparation of 157 nm resist polymers; (1) all-acrylic, (2) all-norbornene, (3) acrylic-norbornene, and (4) acrylic-styrenic systems.

IT **370866-17-4P 370866-19-6P 370866-20-9P**
370866-28-7P 370866-33-4P 370866-39-0P
370866-44-7P 370866-47-0P 370866-48-1P

(synthesis and properties and lithog. evaluation of
fluoropolymers based on α -trifluoromethylacrylate
copolymers for vacuum UV **photoresist** applications)

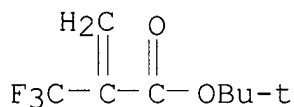
RN 370866-17-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2,2,2-trifluoro-1-
(trifluoromethyl)ethyl ester, polymer with 1,1-dimethylethyl
2-(trifluoromethyl)-2-propenoate and 2-(trifluoromethyl)-2-
propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 105935-24-8

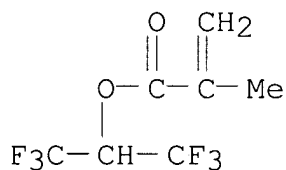
CMF C8 H11 F3 O2



CM 2

CRN 3063-94-3

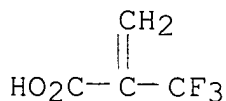
CMF C7 H6 F6 O2



CM 3

CRN 381-98-6

CMF C4 H3 F3 O2



RN 370866-19-6 HCAPLUS

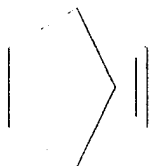
CN 2-Propenoic acid, 2-(trifluoromethyl)-, polymer with

bicyclo[2.2.1]hept-2-ene (9CI) (CA INDEX NAME)

CM 1

CRN 498-66-8

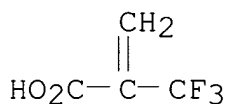
CMF C7 H10



CM 2

CRN 381-98-6

CMF C4 H3 F3 O2



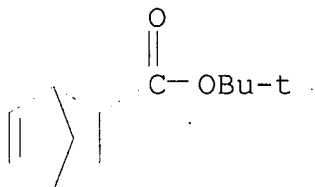
RN 370866-20-9 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylethyl ester, polymer with 2-(trifluoromethyl)-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

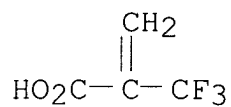
CRN 154970-45-3

CMF C12 H18 O2



CM 2

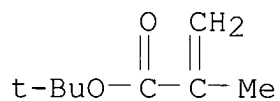
CRN 381-98-6
CMF C4 H3 F3 O2



RN 370866-28-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with bicyclo[2.2.1]hept-2-ene and 2-(trifluoromethyl)-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 585-07-9
CMF C8 H14 O2



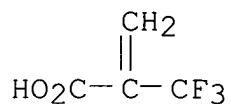
CM 2

CRN 498-66-8
CMF C7 H10



CM 3

CRN 381-98-6
CMF C4 H3 F3 O2

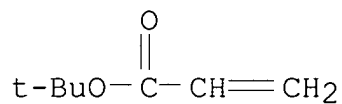


RN 370866-33-4 HCAPLUS
CN 2-Propenoic acid, 2-(trifluoromethyl)-, polymer with
bicyclo[2.2.1]hept-2-ene and 1,1-dimethylethyl 2-propenoate (9CI)
(CA INDEX NAME)

CM 1

CRN 1663-39-4

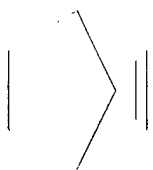
CMF C7 H12 O2



CM 2

CRN 498-66-8

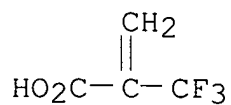
CMF C7 H10



CM 3

CRN 381-98-6

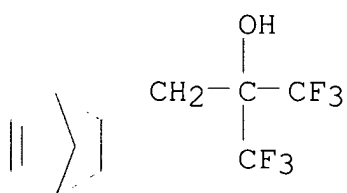
CMF C4 H3 F3 O2



RN 370866-39-0 HCAPLUS
 CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester,
 polymer with α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

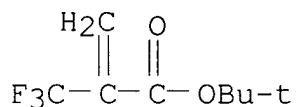
CM 1

CRN 196314-61-1
 CMF C11 H12 F6 O



CM 2

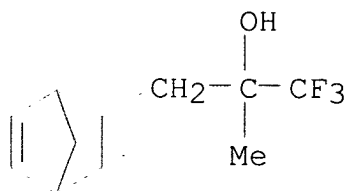
CRN 105935-24-8
 CMF C8 H11 F3 O2



RN 370866-44-7 HCAPLUS
 CN 2-Propenoic acid, 2-(trifluoromethyl)-, methyl ester, polymer with
 α -methyl- α -(trifluoromethyl)bicyclo[2.2.1]hept-2-ene-2-ethanol (9CI) (CA INDEX NAME)

CM 1

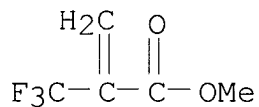
CRN 370866-43-6
 CMF C11 H15 F3 O



CM 2

CRN 382-90-1

CMF C5 H5 F3 O2



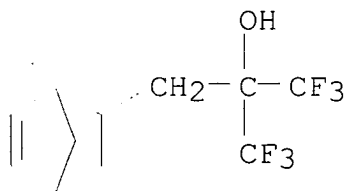
RN 370866-47-0 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with bicyclo[2.2.1]hept-2-ene and α,α -bis(trifluoromethyl)bicyclo[2.2.1]hept-5-ene-2-ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 196314-61-1

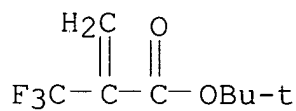
CMF C11 H12 F6 O



CM 2

CRN 105935-24-8

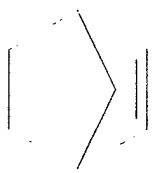
CMF C8 H11 F3 O2



CM 3

CRN 498-66-8

CMF C7 H10



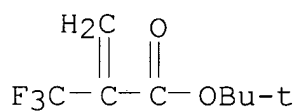
RN 370866-48-1 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, polymer with
bicyclo[2.2.1]hept-2-ene and 1,1-dimethylethyl
2-(trifluoromethyl)-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 105935-24-8

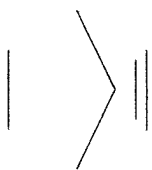
CMF C8 H11 F3 O2



CM 2

CRN 498-66-8

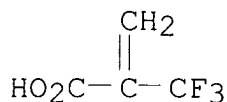
CMF C7 H10



CM 3

CRN 381-98-6

CMF C4 H3 F3 O2



CC 74-5 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
Section cross-reference(s): 36

IT 213740-80-8, Di-(4-tert-butylphenyl)iodonium
perfluorooctanesulfonate
(**photoacid** generator; lithog. evaluation of
fluoropolymers based on α -trifluoromethylacrylate
copolymers for vacuum UV photoresist applications)

IT **370866-17-4P 370866-19-6P 370866-20-9P**
370866-22-1P 370866-24-3P 370866-28-7P
370866-33-4P 370866-36-7P 370866-39-0P
370866-41-4P 370866-44-7P 370866-47-0P
370866-48-1P

(synthesis and properties and lithog. evaluation of
fluoropolymers based on α -trifluoromethylacrylate
copolymers for vacuum UV **photoresist** applications)

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L60 ANSWER 39 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:396557 HCAPLUS

DOCUMENT NUMBER: 134:374061

TITLE: Positive resist composition with high
transparency to UV laser comprising acrylic
resin with fluorine-containing group and
patterning process

INVENTOR(S): Tsutsumi, Kentaro; Ootani, Michitaka; Maeda,
Kazuhiko

PATENT ASSIGNEE(S): Central Glass Company, Limited, Japan

SOURCE: Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

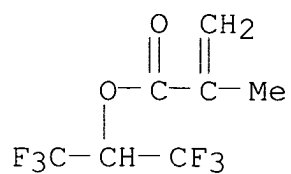
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

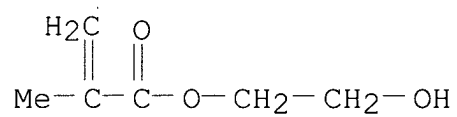
PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
EP 1103856	A1	20010530	EP 2000-125919	2000 1127
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001154362	A2	20010608	JP 1999-338701	1999 1129
TW 563000	B	20031121	TW 2000-89125249	2000 1128
US 6723485	B1	20040420	US 2000-722571	2000 1128
PRIORITY APPLN. INFO.:			JP 1999-338701	A 1999 1129
<p>AB Disclosed is a pos. resist composition comprising (a) an acrylic resin which is subject to a change in solubility in a basic aqueous solution, the acrylic resin comprising an acrylic or methacrylic acid ester unit comprising an ester moiety with a fluorine-containing group; and (b) a photoacid generator capable of releasing an acid when irradiated with a laser. The composition is high in transparency to vacuum UV laser beams, particularly the F2 excimer laser beam, and high in sensitivity.</p> <p>IT 340299-66-3P (pos. resist composition with high transparency to UV laser comprising acrylic resin with fluorine-containing group)</p> <p>RN 340299-66-3 HCAPLUS</p> <p>CN 2-Propenoic acid, 2-methyl-, polymer with cyclohexyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and 2,2,2-trifluoro-1-(trifluoromethyl)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)</p> <p>CM 1</p> <p>CRN 3063-94-3</p> <p>CMF C7 H6 F6 O2</p>				



CM 2

CRN 868-77-9

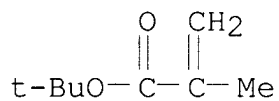
CMF C6 H10 O3



CM 3

CRN 585-07-9

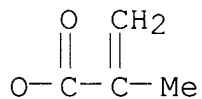
CMF C8 H14 O2



CM 4

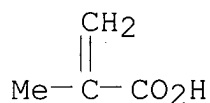
CRN 101-43-9

CMF C10 H16 O2



CM 5

CRN 79-41-4
CMF C4 H6 O2



IT 340299-68-5P 340299-70-9P 340299-72-1P
340299-79-8P

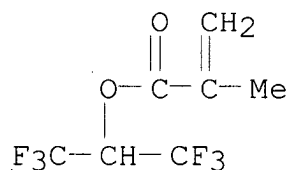
(pos. **resist** composition with high transparency to UV
laser comprising acrylic resin with fluorine-containing group)

RN 340299-68-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,1-dimethylethyl
2-methyl-2-propenoate, 2,2,2-trifluoro-1-(trifluoromethyl)ethyl
2-methyl-2-propenoate and 2,2,2-trifluoro-1-(trifluoromethyl)ethyl
2-propenoate (9CI) (CA INDEX NAME)

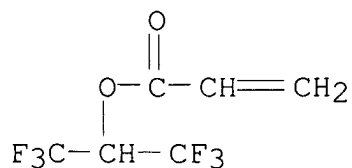
CM 1

CRN 3063-94-3
CMF C7 H6 F6 O2



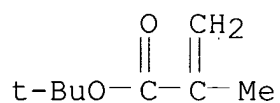
CM 2

CRN 2160-89-6
CMF C6 H4 F6 O2



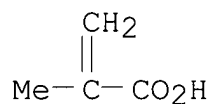
CM 3

CRN 585-07-9
CMF C8 H14 O2



CM 4

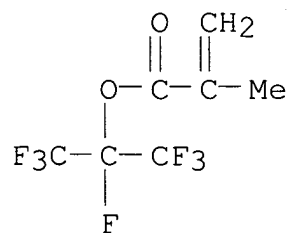
CRN 79-41-4
CMF C4 H6 O2



RN 340299-70-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 1,1-dimethylethyl
2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and
1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl 2-methyl-2-propenoate
(9CI) (CA INDEX NAME)

CM 1

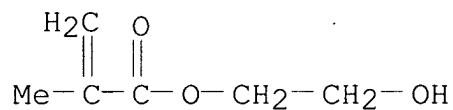
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CMF C7 H5 F7 O2



CM 2

CRN 868-77-9

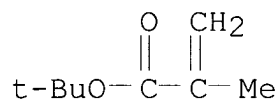
CMF C6 H10 O3



CM 3

CRN 585-07-9

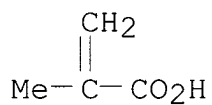
CMF C8 H14 O2



CM 4

CRN 79-41-4

CMF C4 H6 O2



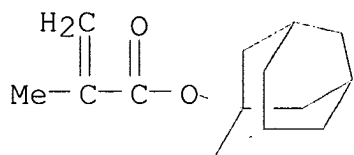
RN 340299-72-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,1-dimethylethyl
 2-methyl-2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-
 heptadecafluorodecyl 2-methyl-2-propenoate, 2-hydroxyethyl
 2-methyl-2-propenoate and tricyclo[3.3.1.1^{3,7}]dec-1-yl
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 16887-36-8

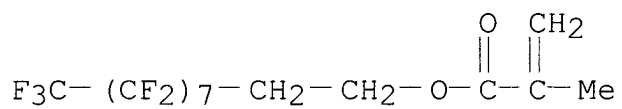
CMF C14 H20 O2



CM 2

CRN 1996-88-9

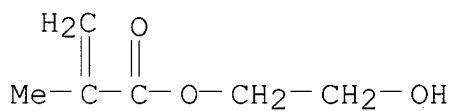
CMF C14 H9 F17 O2



CM 3

CRN 868-77-9

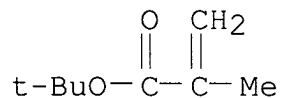
CMF C6 H10 O3



CM 4

CRN 585-07-9

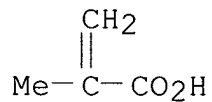
CMF C8 H14 O2



CM 5

CRN 79-41-4

CMF C4 H6 O2



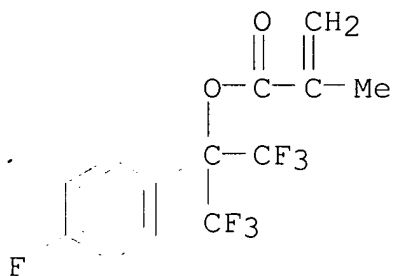
RN 340299-79-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2,2,2-trifluoro-1-(4-fluorophenyl)-1-(trifluoromethyl)ethyl 2-methyl-2-propenoate and 2,2,2-trifluoro-1-(trifluoromethyl)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 151868-14-3

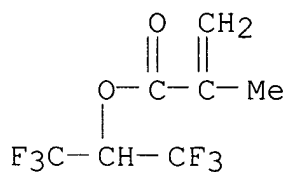
CMF C13 H9 F7 O2



CM 2

CRN 3063-94-3

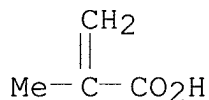
CMF C7 H6 F6 O2



CM 3

CRN 79-41-4

CMF C4 H6 O2



IC ICM G03F007-039
ICS G03F007-004
CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT **340299-66-3P**
(pos. **resist** composition with high transparency to UV
laser comprising acrylic resin with fluorine-containing group)
IT 28825-23-2P, Poly(1,1,1,3,3,3-hexafluoroisopropyl methacrylate)
340299-64-1P **340299-68-5P 340299-70-9P**
340299-72-1P 340299-74-3P 340299-76-5P
340299-79-8P
(pos. **resist** composition with high transparency to UV
laser comprising acrylic resin with fluorine-containing group)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L60 ANSWER 40 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:380920 HCAPLUS
DOCUMENT NUMBER: 134:359532
TITLE: Nitrile/fluoroalcohol-containing photoresists
and associated processes for microlithography
INVENTOR(S): Fryd, Michael; Schadt, Frank Leonard, III;
Periyasamy, Mookkan
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
WO 2001037047	A2	20010525	WO 2000-US31136	2000 1114
WO 2001037047	A3	20020328		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,
CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,
TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE,
CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR,
NE, SN, TD, TG

EP 1240554 A2 20020918 EP 2000-978579

2000
1114

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2004500596 T2 20040108 JP 2001-539078

2000
1114

US 6503686 B1 20030107 US 2000-714782

2000
1116

PRIORITY APPLN. INFO.:

US 1999-166035P P

1999
1117

WO 2000-US31136 W

2000
1114

AB The invention pertains to photoimaging and use of photoresists (pos.- and neg.-working) for imaging in the production of semiconductor devices and to photoresists containing polymer compns. having high UV transparency, particularly at short wavelengths, e. g., 157 nm or 193 nm, that are useful as base resins in resists and potentially, in many other applications. Nitrile/fluoroalc.-containing photoresists and associated processes for microlithog. are described. These photoresists are comprised of a fluoroalc. functional group and a nitrile-containing compound which together simultaneously impart high UV transparency and development in basic media to these materials. The materials have high UV transparency, particularly at short wavelengths, e.g., 157 nm, which makes them highly useful for lithog. at these short wavelengths.

IT **339265-98-4P 339265-99-5P 339266-00-1P**
339266-01-2P

for (preparation of polymers for nitrile/fluoroalc.-containing compns.

photoresists having high UV transparency)

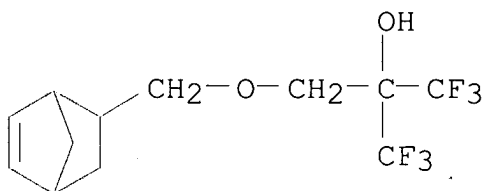
RN 339265-98-4 HCAPLUS

CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with
2-[(bicyclo[2.2.1]hept-5-en-2-ylmethoxy)methyl]-1,1,1,3,3,3-
hexafluoro-2-propanol, 2-propenenitrile and 1,1,1-trifluoro-4-
methyl-2-(trifluoromethyl)-4-penten-2-ol (9CI) (CA INDEX NAME)

CM 1

CRN 262617-23-2

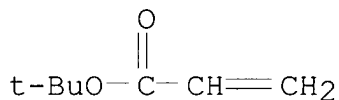
CMF C12 H14 F6 O2



CM 2

CRN 1663-39-4

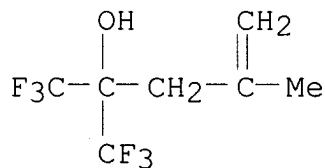
CMF C7 H12 O2



CM 3

CRN 665-05-4

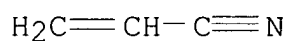
CMF C7 H8 F6 O



CM 4

CRN 107-13-1

CMF C3 H3 N



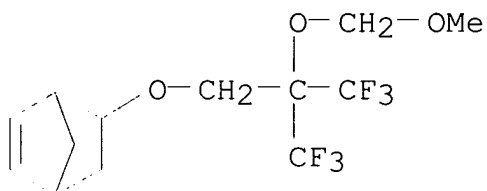
RN 339265-99-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-propenenitrile and
 5-[3,3,3-trifluoro-2-(methoxymethoxy)-2-(trifluoromethyl)propoxy]bicyclo[2.2.1]hept-2-ene (9CI) (CA INDEX
 NAME)

CM 1

CRN 305815-64-9

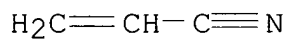
CMF C13 H16 F6 O3



CM 2

CRN 107-13-1

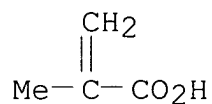
CMF C3 H3 N



CM 3

CRN 79-41-4

CMF C4 H6 O2



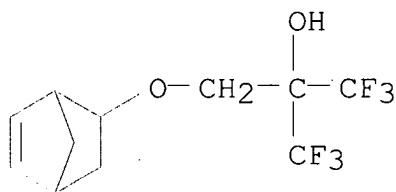
RN 339266-00-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with 2-[(bicyclo[2.2.1]hept-5-en-2-yloxy)methyl]-1,1,1,3,3,3-hexafluoro-2-propanol and 2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

CRN 305815-63-8

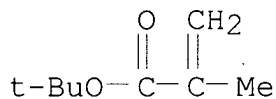
CMF C11 H12 F6 O2



CM 2

CRN 585-07-9

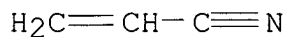
CMF C8 H14 O2



CM 3

CRN 107-13-1

CMF C3 H3 N



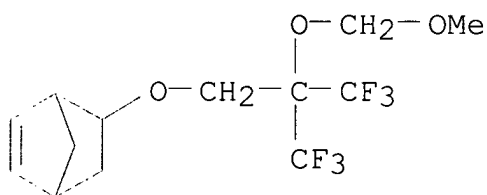
RN 339266-01-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,1-dimethylethyl
2-methyl-2-propenoate, 2-propenenitrile and 5-[3,3,3-trifluoro-2-
(methoxymethoxy)-2-(trifluoromethyl)propoxy]bicyclo[2.2.1]hept-2-
ene (9CI) (CA INDEX NAME)

CM 1

CRN 305815-64-9

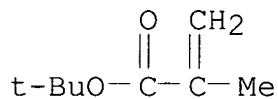
CMF C13 H16 F6 O3



CM 2

CRN 585-07-9

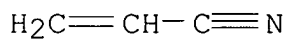
CMF C8 H14 O2



CM 3

CRN 107-13-1

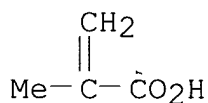
CMF C3 H3 N



CM 4

CRN 79-41-4

CMF C4 H6 O2



IC ICM G03F007-004
 CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 Section cross-reference(s): 76
 IT 66003-78-9, Triphenylsulfonium triflate
 (photoacid generator, or photoresists having high UV
 transparency and nitrile/fluoroalc.-containing polymer compns.)
 IT 339265-97-3P **339265-98-4P 339265-99-5P**
339266-00-1P 339266-01-2P
 (preparation of polymers for nitrile/fluoroalc.-containing compns.
 for
photoresists having high UV transparency)

L60 ANSWER 41 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2001:261353 HCAPLUS
 DOCUMENT NUMBER: 134:303020
 TITLE: Far-UV sensitive positive-working chemically
 amplified photoresist composition for micro
 photolithography
 INVENTOR(S): Sato, Kenichiro; Kodama, Kunihiro; Aogo,
 Toshiaki
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 45 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: **Patent**
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 2001100421	A2	<u>20010413</u>	JP 1999-280202	1999 0930

PRIORITY APPLN. INFO.: <--
 JP 1999-280202
 1999
 0930
 <--

AB The title composition contains a **photoacid** generator and a
 resin increasing the solubility towards an alkali developer by
 reacting

with an acid, wherein the resin has a quaternary ammonium salt group. The addition of the acid-sensitive resin containing quaternary ammonium salt group to the composition provides improved development characteristics and eliminates rough edges on the pattern.

IT **334643-16-2P 334643-69-5P 334643-78-6P**

(resin containing quaternary ammonium salt group in far-UV sensitive pos.-working chemical amplified **photoresist** composition)

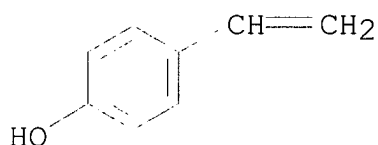
RN 334643-16-2 HCAPLUS

CN Benzenaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, salt with trifluoromethanesulfonic acid (1:1), polymer with 1,1-dimethylethyl 2-methyl-2-propenoate and 4-ethenylphenol (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

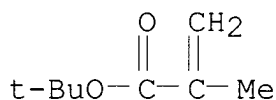
CMF C8 H8 O



CM 2

CRN 585-07-9

CMF C8 H14 O2



CM 3

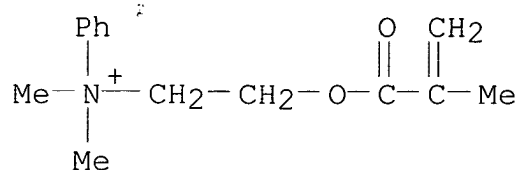
CRN 334643-15-1

CMF C14 H20 N O2 . C F3 O3 S

CM 4

CRN 334643-14-0

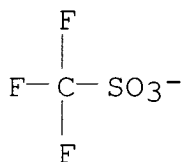
CMF C14 H20 N O2



CM 5

CRN 37181-39-8

CMF C F3 O3 S



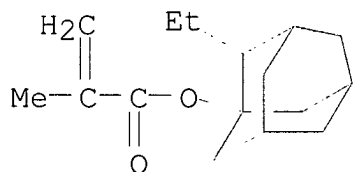
RN 334643-69-5 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, salt with 6,7-dihydroxy-2-naphthalenesulfonic acid (1:1), polymer with 1,1-dimethyl-2-oxo-2-[(tetrahydro-2-oxo-3-furanyl)oxy]ethyl 2-methyl-2-propenoate and 2-ethyltricyclo[3.3.1.3⁷]dec-1-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 334643-68-4

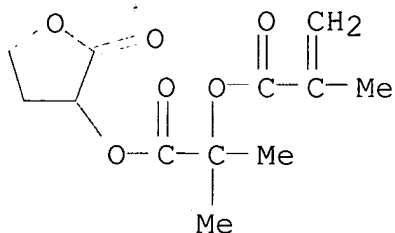
CMF C16 H24 O2



CM 2

CRN 288303-54-8

CMF C12 H16 O6



CM 3

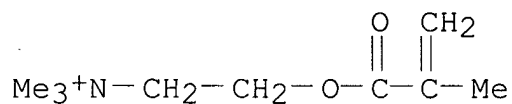
CRN 334643-67-3

CMF C10 H7 O5 S . C9 H18 N O2

CM 4

CRN 33611-56-2

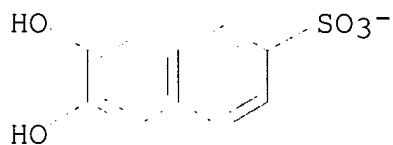
CMF C9 H18 N O2



CM 5

CRN 32743-86-5

CMF C10 H7 O5 S



RN 334643-78-6 HCAPLUS

CN Cholan-24-oic acid, 12-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, 1,1-dimethylethyl ester, (3 β ,5 β ,12 α)-, polymer with N-ethyl-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethanaminium salt with trifluoromethanesulfonic acid (1:1) and tetrahydro-5-methyl-2-oxo-3-furanyl 2-methyl-2-

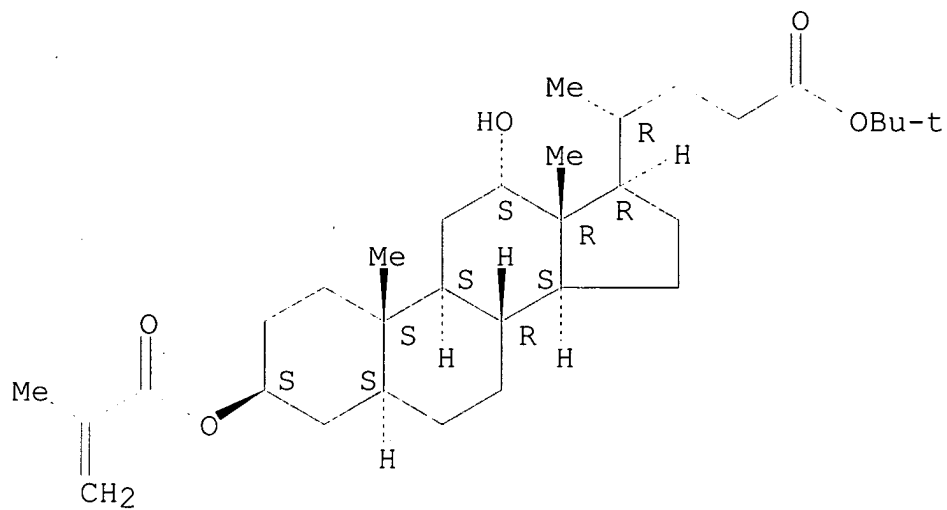
propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 334643-77-5

CMF C32 H52 O5

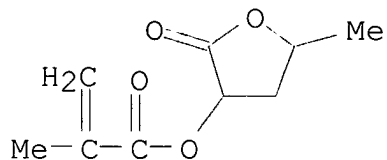
Absolute stereochemistry.



CM 2

CRN 324761-39-9

CMF C9 H12 O4



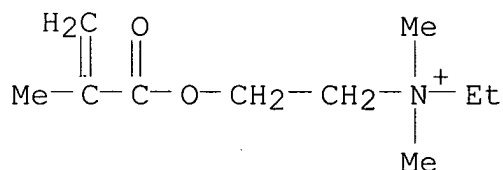
CM 3

CRN 334643-04-8

CMF C10 H20 N O2 . C F3 O3 S

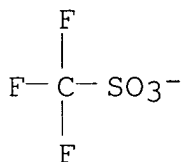
CM 4

CRN 48063-69-0
CMF C10 H20 N O2



CM 5

CRN 37181-39-8
CMF C F3 O3 S



IC ICM G03F007-039
ICS H01L021-027

CC **74-5** (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)

IT 334642-76-1DP, partially hydrolyzed 334642-79-4DP, partially hydrolyzed 334642-82-9DP, partially hydrolyzed 334642-85-2DP, partially hydrolyzed 334642-89-6DP, partially hydrolyzed 334642-93-2DP, partially hydrolyzed 334642-98-7DP, partially hydrolyzed 334643-02-6DP, partially hydrolyzed 334643-05-9DP, partially hydrolyzed 334643-09-3DP, partially hydrolyzed 334643-12-8DP, partially hydrolyzed **334643-16-2P** 334643-19-5DP, partially hydrolyzed 334643-22-0DP, partially hydrolyzed 334643-24-2DP, partially hydrolyzed 334643-28-6DP, partially hydrolyzed 334643-31-1DP, partially hydrolyzed 334643-36-6DP, partially hydrolyzed 334643-39-9DP, partially hydrolyzed 334643-42-4DP, partially hydrolyzed 334643-44-6P 334643-47-9P 334643-50-4P 334643-54-8P 334643-57-1P 334643-62-8P 334643-65-1P **334643-69-5P** 334643-72-0P 334643-75-3P **334643-78-6P** 334666-19-2DP, partially hydrolyzed 334666-22-7P 334666-25-0P 334666-27-2P 334666-29-4P

(resin containing quaternary ammonium salt group in far-UV sensitive pos.-working chemical amplified **photoresist**)

composition)

L60 ANSWER 42 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1999:12435 HCAPLUS
 DOCUMENT NUMBER: 130:82958
 TITLE: Coating composition binder containing hydroxyl groups, its production and use in automotive refinish coatings
 INVENTOR(S): Shepler, Stewart
 PATENT ASSIGNEE(S): BASF Corporation, USA
 SOURCE: Eur. Pat. Appl., 19 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 885909	A1	19981223	EP 1998-110767	1998 0612
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6107403	A	20000822	US 1997-878881	1997 0619
PRIORITY APPLN. INFO.:			US 1997-878881	A 1997 0619
			US 1995-396027	B1 1995 0228

AB The title coating compns. comprise (A) ≥ 1 OH group-containing binder consisting of ≥ 1 polyacrylate resin which contains OH groups and (B) ≥ 1 crosslinking agent, characterized in that an aromatic carboxylic acid or anhydride is added to component (A) after its preparation or to the coating composition Thus, polyester,
 prepared from trimethylolpropane, phthalic anhydride, and isononanoic acid and having OH number 97.2 mg KOH/g, was mixed into a composition containing VeoVa 10, styrene, 4-hydroxy-Bu methacrylate, Me methacrylate, and benzoic acid to give a binder (A) having OH number 90 and acid number 5.3. The above binder (A) was blended with

crosslinker Desmodur N 3390 solution and other additives, applied onto phosphatized steel panels, and dried at 20° for 16 h to a film thickness 50-60 µm. The film had good solvent and masking tape resistance.

IT **182698-80-2P 182698-81-3P 182698-82-4P**
182698-83-5P 182698-84-6P 182698-85-7P
182698-86-8P 182698-87-9P

(composition based on a binder containing **hydroxyl** groups with long pot-life for automotive coatings with good leveling and solvent and masking **resistance**)

RN 182698-80-2 HCAPLUS

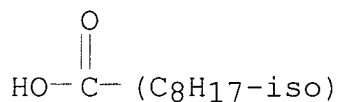
CN tert-Decanoic acid, ethenyl ester, polymer with Desmodur N 3390, ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 4-hydroxybutyl 2-methyl-2-propenoate, 1,3-isobenzofurandione and methyl 2-methyl-2-propenoate, benzoate isononanoate (9CI) (CA INDEX NAME)

CM 1

CRN 26896-18-4

CMF C9 H18 O2

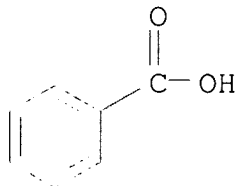
CCI IDS



CM 2

CRN 65-85-0

CMF C7 H6 O2



CM 3

CRN 182479-11-4

CMF (C12 H22 O2 . C8 H14 O3 . C8 H8 . C8 H4 O3 . C6 H14 O3 . C5
H8 O2 . Unspecified)x

CCI PMS

CM 4

CRN 96510-63-3

CMF Unspecified

CCI MAN

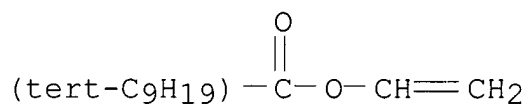
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CM 5

CRN 26544-09-2

CMF C12 H22 O2

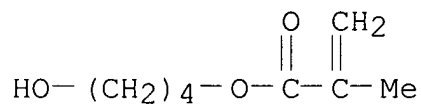
CCI IDS



CM 6

CRN 997-46-6

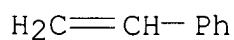
CMF C8 H14 O3



CM 7

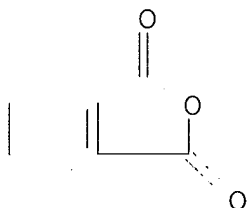
CRN 100-42-5

CMF C8 H8



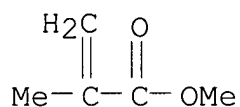
CM 8

CRN 85-44-9
CMF C8 H4 O3



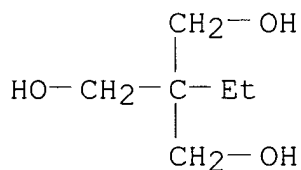
CM 9

CRN 80-62-6
CMF C5 H8 O2



CM 10

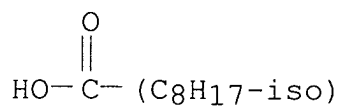
CRN 77-99-6
CMF C6 H14 O3



RN 182698-81-3 HCAPLUS
CN tert-Decanoic acid, ethenyl ester, polymer with ethenylbenzene,
2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 4-hydroxybutyl
2-methyl-2-propenoate, 1,3-isobenzofurandione, methyl
2-methyl-2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-
triazine-2,4,6(1H,3H,5H)-trione, benzoate isononanoate (9CI) (CA
INDEX NAME)

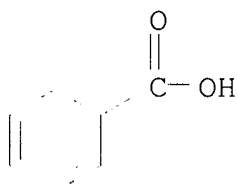
CM 1

CRN 26896-18-4
 CMF C9 H18 O2
 CCI IDS



CM 2

CRN 65-85-0
 CMF C7 H6 O2

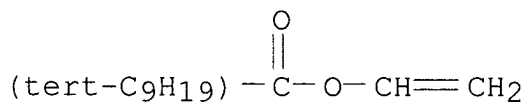


CM 3

CRN 182479-15-8
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 C6 H14 O3 . C5 H8 O2)x
 CCI PMS

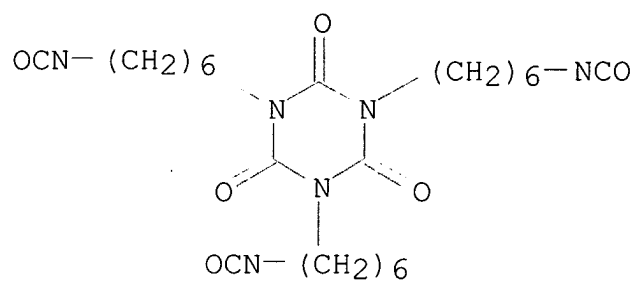
CM 4

CRN 26544-09-2
 CMF C12 H22 O2
 CCI IDS



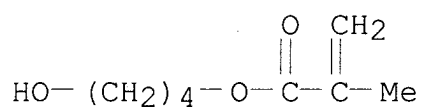
CM 5

CRN 3779-63-3
CMF C24 H36 N6 O6



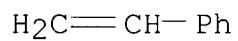
CM 6

CRN 997-46-6
CMF C8 H14 O3



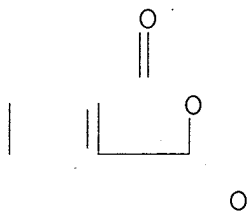
CM 7

CRN 100-42-5
CMF C8 H8



CM 8

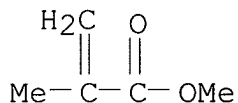
CRN 85-44-9
CMF C8 H4 O3



CM 9

CRN 80-62-6

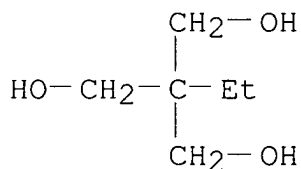
CMF C5 H8 O2



CM 10

CRN 77-99-6

CMF C6 H14 O3



RN 182698-82-4 HCAPLUS

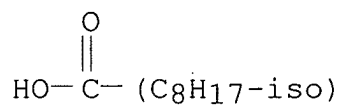
CN tert-Decanoic acid, ethenyl ester, polymer with Desmodur N 3390, ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 2-hydroxyethyl 2-methyl-2-propenoate, 1,3-isobenzofurandione and methyl 2-methyl-2-propenoate, benzoate isononanoate (9CI) (CA INDEX NAME)

CM 1

CRN 26896-18-4

CMF C9 H18 O2

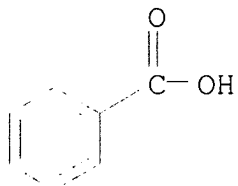
CCI IDS



CM 2

CRN 65-85-0

CMF C7 H6 O2



CM 3

CRN 182479-20-5

CMF (C12 H22 O2 . C8 H8 . C8 H4 O3 . C6 H14 O3 . C6 H10 O3 . C5 H8 O2 . Unspecified)x

CCI PMS

CM 4

CRN 96510-63-3

CMF Unspecified

CCI MAN

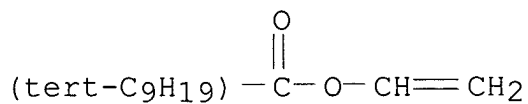
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 5

CRN 26544-09-2

CMF C12 H22 O2

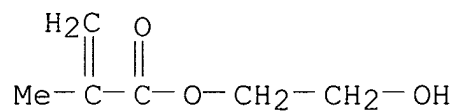
CCI IDS



CM 6

CRN 868-77-9

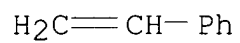
CMF C6 H10 O3



CM 7

CRN 100-42-5

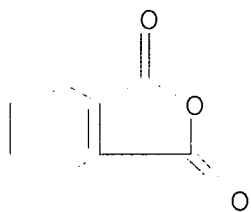
CMF C8 H8



CM 8

CRN 85-44-9

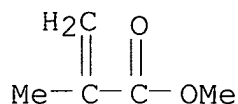
CMF C8 H4 O3



CM 9

CRN 80-62-6

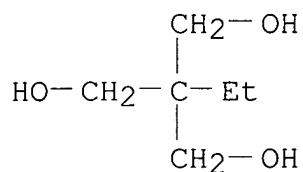
CMF C5 H8 O2



CM 10

CRN 77-99-6

CMF C6 H14 O3



RN 182698-83-5 HCAPLUS

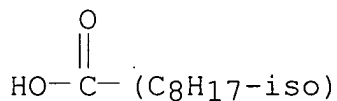
CN tert-Decanoic acid, ethenyl ester, polymer with ethenylbenzene,
 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 2-hydroxyethyl
 2-methyl-2-propenoate, 1,3-isobenzofurandione, methyl
 2-methyl-2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-
 triazine-2,4,6(1H,3H,5H)-trione, benzoate isononanoate (9CI) (CA
 INDEX NAME)

CM 1

CRN 26896-18-4

CMF C9 H18 O2

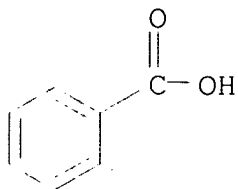
CCI IDS



CM 2

CRN 65-85-0

CMF C7 H6 O2



CM 3

CRN 182479-24-9

CMF (C24 H36 N6 O6 . C12 H22 O2 . C8 H8 . C8 H4 O3 . C6 H14 O3 .
C6 H10 O3 . C5 H8 O2) x

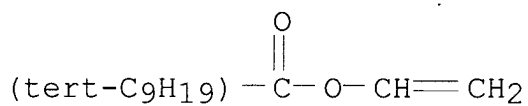
CCI PMS

CM 4

CRN 26544-09-2

CMF C12 H22 O2

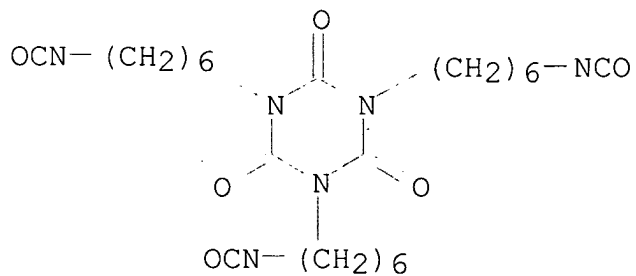
CCI IDS



CM 5

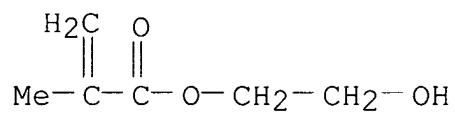
CRN 3779-63-3

CMF C24 H36 N6 O6



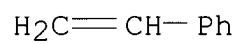
CM 6

CRN 868-77-9
CMF C6 H10 O3



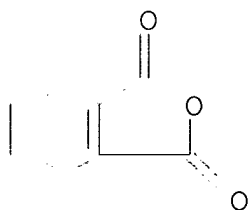
CM 7

CRN 100-42-5
CMF C8 H8



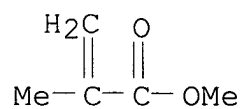
CM 8

CRN 85-44-9
CMF C8 H4 O3



CM 9

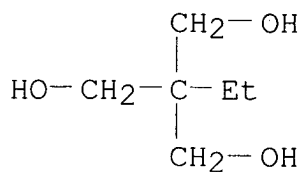
CRN 80-62-6
CMF C5 H8 O2



CM 10

CRN 77-99-6

CMF C6 H14 O3



RN 182698-84-6 HCAPLUS

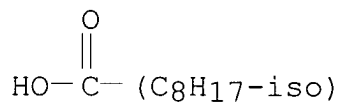
CN tert-Decanoic acid, ethenyl ester, polymer with Desmodur N 3390, ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 4-hydroxybutyl 2-methyl-2-propenoate, 1,3-isobenzofurandione and methyl 2-methyl-2-propenoate, (1,1-dimethylethyl)benzoate isononanoate (9CI) (CA INDEX NAME)

CM 1

CRN 26896-18-4

CMF C9 H18 O2

CCI IDS



CM 2

CRN 1320-16-7

CMF C11 H14 O2

CCI IDS

D1-CO₂H

D1-Bu-t

CM 3

CRN 182479-11-4

CMF (C12 H22 O2 . C8 H14 O3 . C8 H8 . C8 H4 O3 . C6 H14 O3 . C5
H8 O2 . Unspecified)x

CCI PMS

CM 4

CRN 96510-63-3

CMF Unspecified

CCI MAN

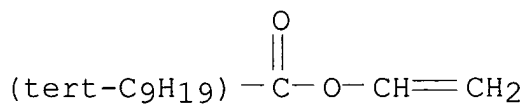
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CM 5

CRN 26544-09-2

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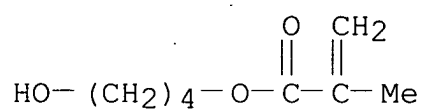
CCI IDS



CM 6

CRN 997-46-6

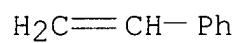
CMF C8 H14 O3



CM 7

CRN 100-42-5

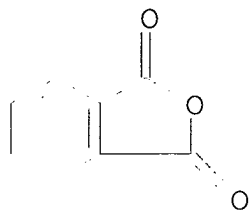
CMF C8 H8



CM 8

CRN 85-44-9

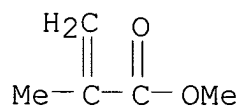
CMF C8 H4 O3



CM 9

CRN 80-62-6

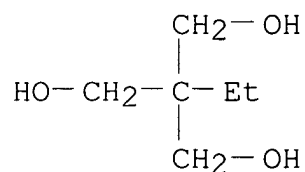
CMF C5 H8 O2



CM 10

CRN 77-99-6

CMF C6 H14 O3



RN 182698-85-7 HCAPLUS

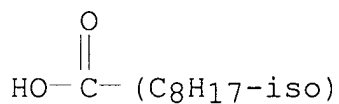
CN tert-Decanoic acid, ethenyl ester, polymer with ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 2-hydroxyethyl 2-methyl-2-propenoate, 1,3-isobenzofurandione, methyl 2-methyl-2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione, (1,1-dimethylethyl)benzoate isononanoate (9CI) (CA INDEX NAME)

CM 1

CRN 26896-18-4

CMF C9 H18 O2

CCI IDS



CM 2

CRN 1320-16-7

CMF C11 H14 O2

CCI IDS

D1-CO₂H

D1-Bu-t

CM 3

CRN 182479-15-8

CMF (C24 H36 N6 O6 . C12 H22 O2 . C8 H14 O3 . C8 H8 . C8 H4 O3 .
C6 H14 O3 . C5 H8 O2)x

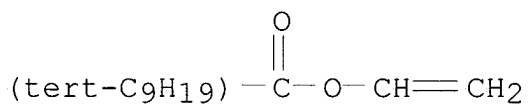
CCI PMS

CM 4

CRN 26544-09-2

CMF C12 H22 O2

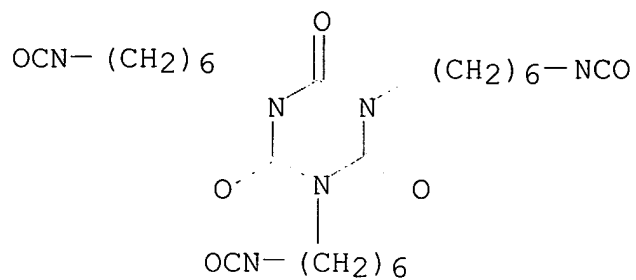
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CM 5

CRN 3779-63-3

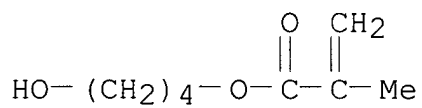
CMF C24 H36 N6 O6



CM 6

CRN 997-46-6

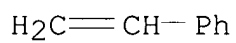
CMF C8 H14 O3



CM 7

CRN 100-42-5

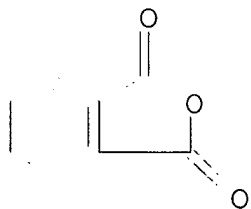
CMF C8 H8



CM 8

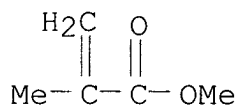
CRN 85-44-9

CMF C8 H4 O3



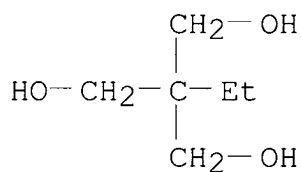
CM 9

CRN 80-62-6
 CMF C5 H8 O2



CM 10

CRN 77-99-6
 CMF C6 H14 O3

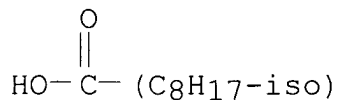


RN 182698-86-8 HCAPLUS

CN tert-Decanoic acid, ethenyl ester, polymer with Desmodur N 3390,
 ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol,
 4-hydroxybutyl 2-methyl-2-propenoate, 1,3-isobenzofurandione and
 methyl 2-methyl-2-propenoate, isononanoate (9CI) (CA INDEX NAME)

CM 1

CRN 26896-18-4
 CMF C9 H18 O2
 CCI IDS



CM 2

CRN 182479-11-4

CMF (C12 H22 O2 . C8 H14 O3 . C8 H8 . C8 H4 O3 . C6 H14 O3 . C5
H8 O2 . Unspecified)x
CCI PMS

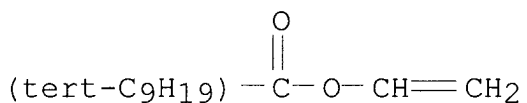
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CRN 96510-63-3
CMF Unspecified
CCI MAN

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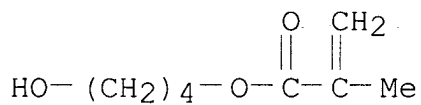
CM 4

CRN 26544-09-2
CMF C12 H22 O2
CCI IDS



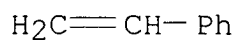
CM 5

CRN 997-46-6
CMF C8 H14 O3



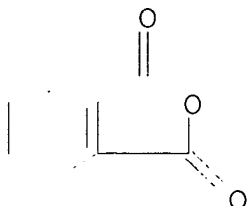
CM 6

CRN 100-42-5
CMF C8 H8



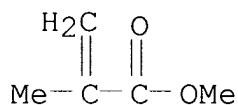
CM 7

CRN 85-44-9
CMF C8 H4 O3



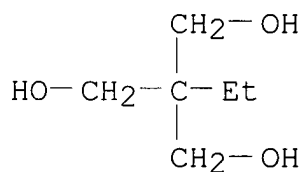
CM 8

CRN 80-62-6
CMF C5 H8 O2



CM 9

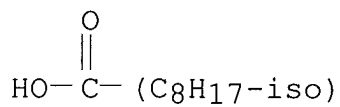
CRN 77-99-6
CMF C6 H14 O3



RN 182698-87-9 HCAPLUS
CN tert-Decanoic acid, ethenyl ester, polymer with ethenylbenzene,
2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 2-hydroxyethyl
2-methyl-2-propenoate, 1,3-isobenzofurandione, methyl
2-methyl-2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-
triazine-2,4,6(1H,3H,5H)-trione, isononanoate (9CI) (CA INDEX
NAME)

CM 1

CRN 26896-18-4
 CMF C9 H18 O2
 CCI IDS

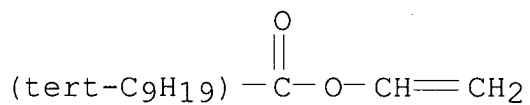


CM 2

CRN 182479-15-8
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 C6 H14 O3 . C5 H8 O2)x
 CCI PMS

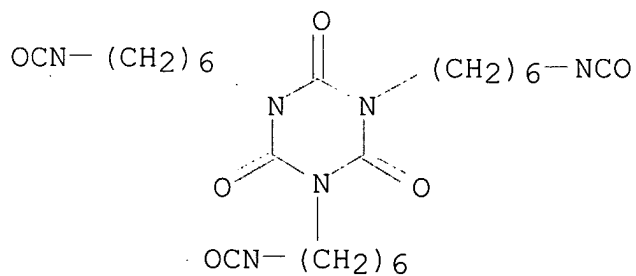
CM 3

CRN 26544-09-2
 CMF C12 H22 O2
 CCI IDS



CM 4

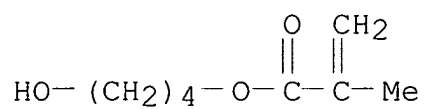
CRN 3779-63-3
 CMF C24 H36 N6 O6



CM 5

CRN 997-46-6

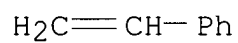
CMF C8 H14 O3



CM 6

CRN 100-42-5

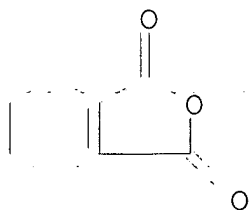
CMF C8 H8



CM 7

CRN 85-44-9

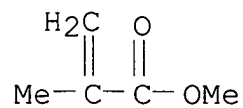
CMF C8 H4 O3



CM 8

CRN 80-62-6

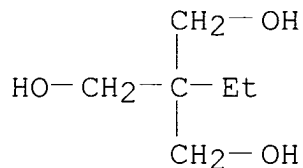
CMF C5 H8 O2



CM 9

CRN 77-99-6

CMF C6 H14 O3



IC ICM C08G018-65

ICS C08G018-28; C08G018-40; C08G018-63; C09D175-04

CC 42-10 (Coatings, Inks, and Related Products)

IT **182698-80-2P 182698-81-3P 182698-82-4P****182698-83-5P 182698-84-6P 182698-85-7P****182698-86-8P 182698-87-9P**

(composition based on a binder containing **hydroxyl** groups with long pot-life for automotive coatings with good leveling and solvent and masking **resistance**)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 43 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:12434 HCAPLUS

DOCUMENT NUMBER: 130:82957

TITLE: Coating composition based on a polyacrylate resin containing hydroxyl groups, its production and use in automotive refinish coatings

INVENTOR(S): Shepler, Stewart; Tye, Antony; Bajc, Gerald; Perisse, Philip

PATENT ASSIGNEE(S): BASF Corporation, USA

SOURCE: Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 885908

A1

19981223

EP 1998-110746

1998

0612

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:

US 1997-878880

A

1997

0619

AB The title coating compns. comprising (A) ≥ 1 OH containing binder of (A1) 20-60% ≥ 1 polyester and (A2) 40-80% ≥ 1 polyacrylate which contains OH groups and was prepared, at least partially, in the presence of component (A1), and (B) ≥ 1 crosslinking agent, characterized in that the polyester (A1) has an OH number 90-130 mg KOH/g, an acid number < 10 mg KOH/g, a number-average mol. weight (Mn) 1300-3500 and a polydispersity 5-50, the polyacrylate resin (A2) was prepared from 4-hydroxy-Bu (meth)acrylate and/or 3-hydroxy-Bu (meth)acrylate and/or hydroxyethyl methacrylate, and has OH number 50-150 and an acid number 0-10, and 0.1-1% [based on the weight of component (A) without solvent] of an aromatic carboxylic acid or anhydride is added to component (A) after its preparation or to the coating composition

Thus, polyester, prepared from trimethylolpropane, phthalic anhydride, and isononanoic acid and having OH number 97.2 mg KOH/g, was mixed into a composition containing VeoVa 10, styrene, 4-hydroxy-Bu methacrylate, Me methacrylate, and benzoic acid to give a binder (A) having OH number 90 and acid number 5.3. The above binder (A) was blended with crosslinker Desmodur N 3390 solution and other additives, applied onto phosphatized steel panels, and dried at 20° for 16 h to a film thickness 50-60 μm . The film had good solvent and masking tape resistance.

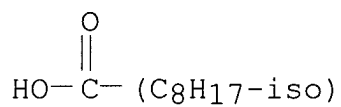
IT **182698-80-2P 182698-81-3P 182698-82-4P**
182698-83-5P 182698-84-6P 182698-85-7P
182698-86-8P 182698-87-9P
(composition based on a polyacrylate resin containing **hydroxyl** groups with long pot-life for automotive coatings with good leveling and solvent and masking **resistance**)

RN 182698-80-2 HCAPLUS

CN tert-Decanoic acid, ethenyl ester, polymer with Desmodur N 3390, ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 4-hydroxybutyl 2-methyl-2-propenoate, 1,3-isobenzofurandione and methyl 2-methyl-2-propenoate, benzoate isononanoate (9CI) (CA INDEX NAME)

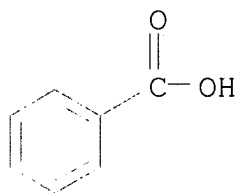
CM 1

CRN 26896-18-4
CMF C9 H18 O2
CCI IDS



CM 2

CRN 65-85-0
CMF C7 H6 O2



CM 3

CRN 182479-11-4
CMF (C12 H22 O2 . C8 H14 O3 . C8 H8 . C8 H4 O3 . C6 H14 O3 . C5
H8 O2 . Unspecified)x
CCI PMS

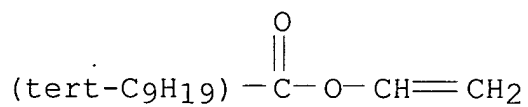
CM 4

CRN 96510-63-3
CMF Unspecified
CCI MAN

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CM 5

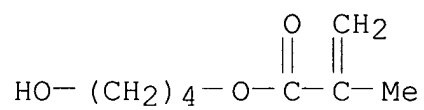
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CMF C12 H22 O2
CCI IDS



CM 6

CRN 997-46-6

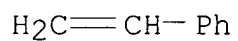
CMF C8 H14 O3



CM 7

CRN 100-42-5

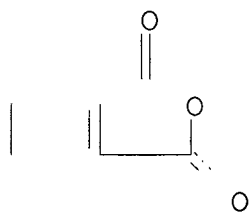
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CM 8

CRN 85-44-9

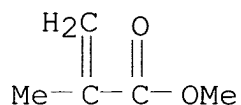
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CM 9

CRN 80-62-6

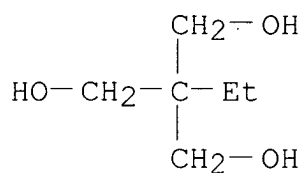
CMF C5 H8 O2



CM 10

CRN 77-99-6

CMF C6 H14 O3



RN 182698-81-3 ,HCAPLUS

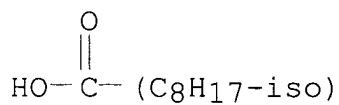
CN tert-Decanoic acid, ethenyl ester, polymer with ethenylbenzene,
 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 4-hydroxybutyl
 2-methyl-2-propenoate, 1,3-isobenzofurandione, methyl
 2-methyl-2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-
 triazine-2,4,6(1H,3H,5H)-trione, benzoate isononanoate (9CI) (CA
 INDEX NAME)

CM 1

CRN 26896-18-4

CMF C9 H18 O2

CCI IDS



CM 2

CRN 65-85-0

CMF C7 H6 O2



CM 3

CRN 182479-15-8

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C6 H14 O3 . C5 H8 O2) x

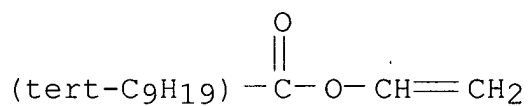
CCI PMS

CM 4

CRN 26544-09-2

CMF C12 H22 O2

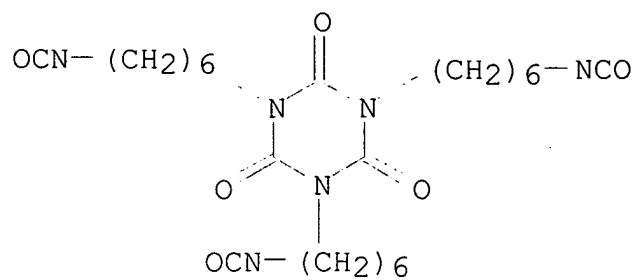
CCI IDS



CM 5

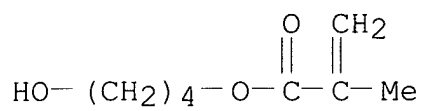
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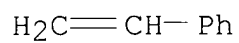
CM 6

CRN 997-46-6
CMF C8 H14 O3



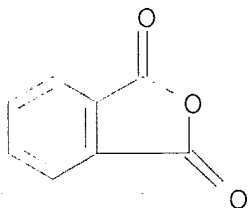
CM 7

CRN 100-42-5
CMF C8 H8



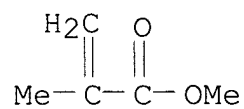
CM 8

CRN 85-44-9
CMF C8 H4 O3



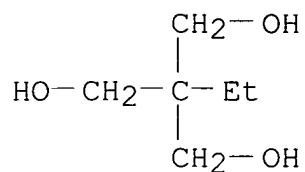
CM 9

CRN 80-62-6
CMF C5 H8 O2



CM 10

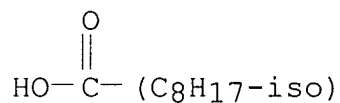
CRN 77-99-6
CMF C6 H14 O3



RN 182698-82-4 HCAPLUS
CN tert-Decanoic acid, ethenyl ester, polymer with Desmodur N 3390, ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 2-hydroxyethyl 2-methyl-2-propenoate, 1,3-isobenzofurandione and methyl 2-methyl-2-propenoate, benzoate isononanoate (9CI) (CA INDEX NAME)

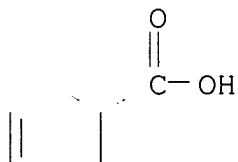
CM 1

CRN 26896-18-4
CMF C9 H18 O2
CCI IDS



CM 2

CRN 65-85-0
CMF C7 H6 O2



CM 3

CRN 182479-20-5
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 H8 O2 . Unspecified)x
 CCI PMS

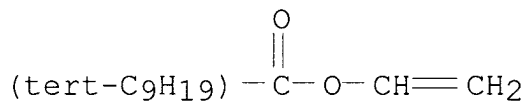
CM 4

CRN 96510-63-3
 CMF Unspecified
 CCI MAN

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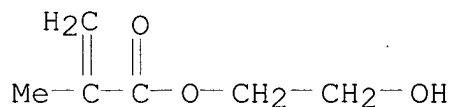
CM 5

CRN 26544-09-2
 CMF C12 H22 O2
 CCI IDS



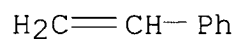
CM 6

CRN 868-77-9
 CMF C6 H10 O3



CM 7

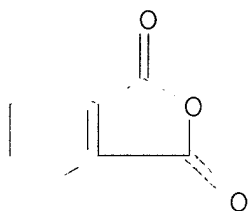
CRN 100-42-5
 CMF C8 H8



CM 8

CRN 85-44-9

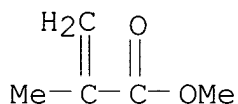
CMF C8 H4 O3



CM 9

CRN 80-62-6

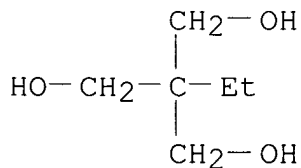
CMF C5 H8 O2



CM 10

CRN 77-99-6

CMF C6 H14 O3



RN 182698-83-5 HCAPLUS

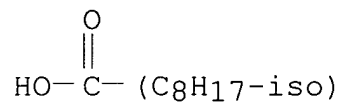
CN tert-Decanoic acid, ethenyl ester, polymer with ethenylbenzene,
 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 2-hydroxyethyl
 2-methyl-2-propenoate, 1,3-isobenzofurandione, methyl
 2-methyl-2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-
 triazine-2,4,6(1H,3H,5H)-trione, benzoate isononanoate (9CI) (CA
 INDEX NAME)

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CRN 26896-18-4

CMF C9 H18 O2

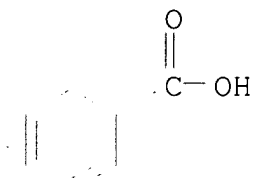
CCI IDS



CM 2

CRN 65-85-0

CMF C7 H6 O2



CM 3

CRN 182479-24-9

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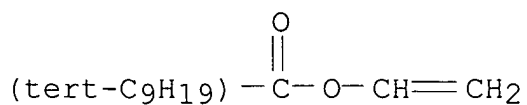
CCI PMS

CM 4

CRN 26544-09-2

CMF C12 H22 O2

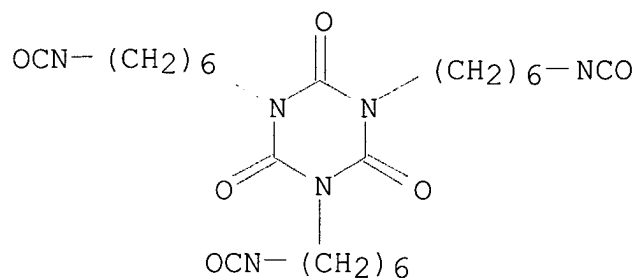
CCI IDS



CM 5

CRN 3779-63-3

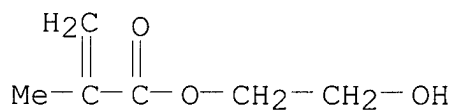
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CM 6

CRN 868-77-9

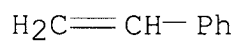
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CM 7

CRN 100-42-5

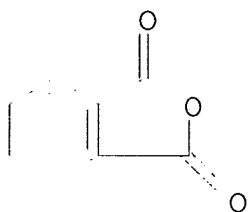
CMF C8 H8



CM 8

CRN 85-44-9

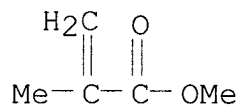
CMF C8 H4 O3



CM 9

CRN 80-62-6

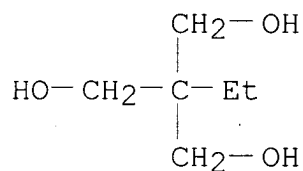
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CM 10

CRN 77-99-6

CMF C6 H14 O3



RN 182698-84-6 HCAPLUS

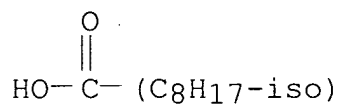
CN tert-Decanoic acid, ethenyl ester, polymer with Desmodur N 3390, ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 4-hydroxybutyl 2-methyl-2-propenoate, 1,3-isobenzofurandione and methyl 2-methyl-2-propenoate, (1,1-dimethylethyl)benzoate isononanoate (9CI) (CA INDEX NAME)

CM 1

CRN 26896-18-4

CMF C9 H18 O2

CCI IDS



CM 2

CRN 1320-16-7
CMF C11 H14 O2
CCI IDS

D1-CO₂H

D1-Bu-t

CM 3

CRN 182479-11-4
CMF (C12 H22 O2 . C8 H14 O3 . C8 H8 . C8 H4 O3 . C6 H14 O3 . C5
H8 O2 . Unspecified)x
CCI PMS

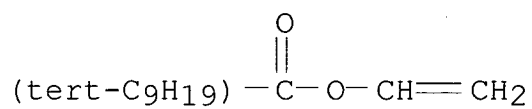
CM 4

CRN 96510-63-3
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 5

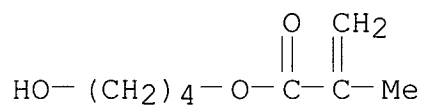
CRN 26544-09-2
CMF C12 H22 O2
CCI IDS



CM 6

CRN 997-46-6

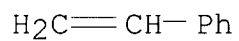
CMF C8 H14 O3



CM 7

CRN 100-42-5

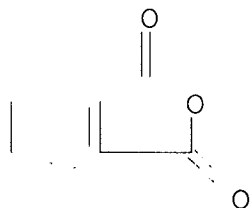
CMF C8 H8



CM 8

CRN 85-44-9

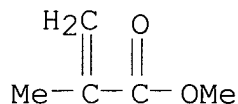
CMF C8 H4 O3



CM 9

CRN 80-62-6

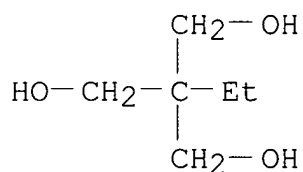
CMF C5 H8 O2



CM 10

CRN 77-99-6

CMF C6 H14 O3



RN 182698-85-7 HCAPLUS

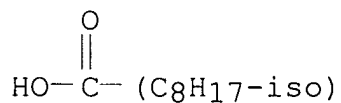
CN tert-Decanoic acid, ethenyl ester, polymer with ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 2-hydroxyethyl 2-methyl-2-propenoate, 1,3-isobenzofurandione, methyl 2-methyl-2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione, (1,1-dimethylethyl)benzoate isononanoate (9CI) (CA INDEX NAME)

CM 1

CRN 26896-18-4

CMF C9 H18 O2

CCI IDS



CM 2

CRN 1320-16-7

CMF C11 H14 O2

CCI IDS

D1-CO₂H

D1-Bu-t

CM 3

CRN 182479-15-8

CMF (C24 H36 N6 O6 . C12 H22 O2 . C8 H14 O3 . C8 H8 . C8 H4 O3 .
C6 H14 O3 . C5 H8 O2) x

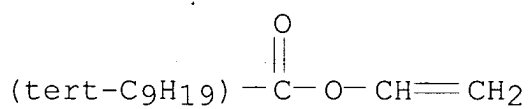
CCI PMS

CM 4

CRN 26544-09-2

CMF C12 H22 O2

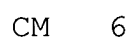
CCI IDS



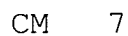
CM 5

CRN 3779-63-3

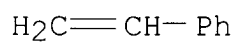
CMF C24 H36 N6 O6



CRN 997-46-6
CMF C8 H14 O3

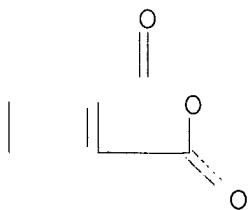


CRN 100-42-5
CMF C8 H8



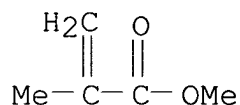
CM 8

CRN 85-44-9
CMF C8 H4 O3



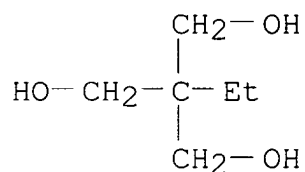
CM 9

CRN 80-62-6
CMF C5 H8 O2



CM 10

CRN 77-99-6
CMF C6 H14 O3

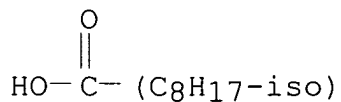


RN 182698-86-8 HCAPLUS

CN tert-Decanoic acid, ethenyl ester, polymer with Desmodur N 3390,
ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol,
4-hydroxybutyl 2-methyl-2-propenoate, 1,3-isobenzofurandione and
methyl 2-methyl-2-propenoate, isononanoate (9CI) (CA INDEX NAME)

CM 1

CRN 26896-18-4
CMF C9 H18 O2
CCI IDS



CM 2

CRN 182479-11-4

CMF (C12 H22 O2 . C8 H14 O3 . C8 H8 . C8 H4 O3 . C6 H14 O3 . C5
H8 O2 . Unspecified)x

CCI PMS

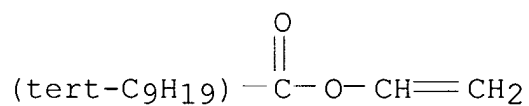
CM 3

CRN 96510-63-3
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

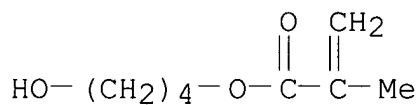
CM 4

CRN 26544-09-2
CMF C12 H22 O2
CCI IDS



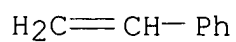
CM 5

CRN 997-46-6
CMF C8 H14 O3



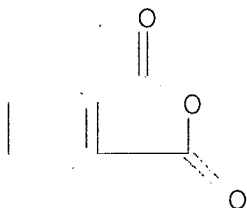
CM 6

CRN 100-42-5
CMF C8 H8



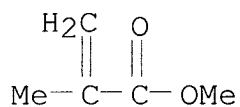
CM 7

CRN 85-44-9
CMF C8 H4 O3



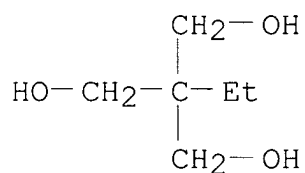
CM 8

CRN 80-62-6
CMF C5 H8 O2



CM 9

CRN 77-99-6
CMF C6 H14 O3



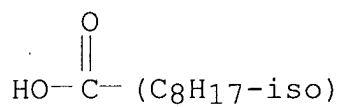
RN 182698-87-9 HCAPLUS
CN tert-Decanoic acid, ethenyl ester, polymer with ethenylbenzene,
2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 2-hydroxyethyl
2-methyl-2-propenoate, 1,3-isobenzofurandione, methyl
2-methyl-2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-
triazine-2,4,6(1H,3H,5H)-trione, isononanoate (9CI) (CA INDEX
NAME)

CM 1

CRN 26896-18-4

CMF C9 H18 O2

CCI IDS



CM 2

CRN 182479-15-8

CMF (C24 H36 N6 O6 . C12 H22 O2 . C8 H14 O3 . C8 H8 . C8 H4 O3 .
C6 H14 O3 . C5 H8 O2)x

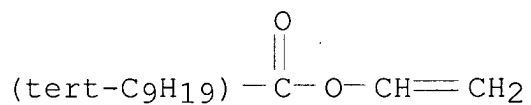
CCI PMS

CM 3

CRN 26544-09-2

CMF C12 H22 O2

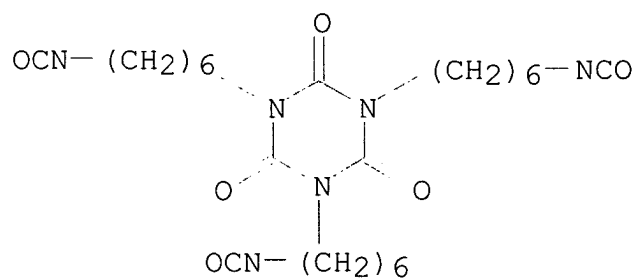
CCI IDS



CM 4

CRN 3779-63-3

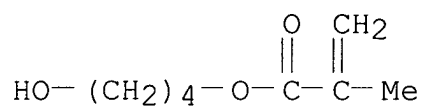
CMF C24 H36 N6 O6



CM 5

CRN 997-46-6

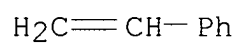
CMF C8 H14 O3



CM 6

CRN 100-42-5

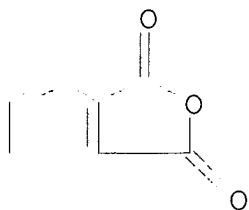
CMF C8 H8



CM 7

CRN 85-44-9

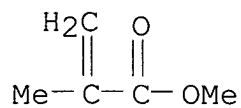
CMF C8 H4 O3



CM 8

CRN 80-62-6

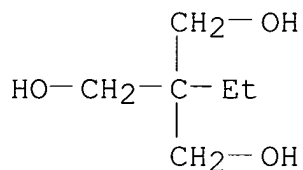
CMF C5 H8 O2



CM 9

CRN 77-99-6

CMF C6 H14 O3



IC ICM C08G018-40

ICS C08G018-63; C08G018-65; C09D151-08; C09D175-04

CC 42-10 (Coatings, Inks, and Related Products)

IT **182698-80-2P 182698-81-3P 182698-82-4P****182698-83-5P 182698-84-6P 182698-85-7P****182698-86-8P 182698-87-9P**

(composition based on a polyacrylate resin containing **hydroxyl** groups with long pot-life for automotive coatings with good leveling and solvent and masking **resistance**)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 44 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:12433 HCAPLUS

DOCUMENT NUMBER: 130:82956

TITLE: Coating composition based on a polyacrylate resin containing hydroxyl groups, its production and use in automotive refinish coatings

INVENTOR(S): Shepler, Stewart; Rubbert, Bernhard; Borgholte, Harald; Hallmann, Olaf

PATENT ASSIGNEE(S): BASF Corporation, USA

SOURCE: Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 885907

A1

19981223

EP 1998-110745

1998

0612

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:

US 1997-878879

A

1997

0619

AB The title coating compns. comprising (A) ≥ 1 OH containing binder of (A1) 20-60% ≥ 1 polyester and (A2) 40-80% ≥ 1 polyacrylate which contains OH groups and was prepared, at least partially, in the presence of component (A1), and (B) ≥ 1 crosslinking agent, characterized in that the polyester (A1) has an OH number 90-130 mg KOH/g, an acid number < 10 mg KOH/g, a number-average mol. weight (Mn) 1300-3500 and a polydispersity 5-50, the polyacrylate resin (A2) was prepared from 4-hydroxy-Bu (meth)acrylate and/or 3-hydroxy-Bu (meth)acrylate and/or hydroxyethyl methacrylate, and has OH number 50-150 and an acid number 0-10, and 0.1-1% [based on the weight of component (A) without solvent] of an aromatic carboxylic acid or anhydride is added to component (A) after its preparation or to the coating composition

Thus, polyester, prepared from trimethylolpropane, phthalic anhydride, and isononanoic acid and having OH number 97.2 mg KOH/g, was mixed into a composition containing VeoVa 10, styrene, 4-hydroxy-Bu methacrylate, Me methacrylate, and benzoic acid to give a binder (A) having OH number 90 and acid number 5.3. The above binder (A) was blended with crosslinker Desmodur N 3390 solution and other additives, applied onto phosphatized steel panels, and dried at 20° for 16 h to a film thickness 50-60 μm . The film had good solvent and masking tape resistance.

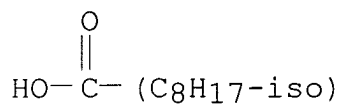
IT **182698-80-2P 182698-81-3P 182698-82-4P**
182698-83-5P 182698-84-6P 182698-85-7P
182698-86-8P 182698-87-9P
(composition based on a polyacrylate resin containing **hydroxyl** groups with long pot-life for automotive coatings with good leveling and solvent and masking **resistance**)

RN 182698-80-2 HCAPLUS

CN tert-Decanoic acid, ethenyl ester, polymer with Desmodur N 3390, ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 4-hydroxybutyl 2-methyl-2-propenoate, 1,3-isobenzofurandione and methyl 2-methyl-2-propenoate, benzoate isononanoate (9CI) (CA INDEX NAME)

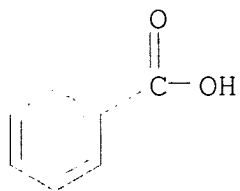
CM 1

CRN 26896-18-4
CMF C9 H18 O2
CCI IDS



CM 2

CRN 65-85-0
CMF C7 H6 O2



CM 3

CRN 182479-11-4
CMF (C₁₂ H₂₂ O₂ . C₈ H₁₄ O₃ . C₈ H₈ . C₈ H₄ O₃ . C₆ H₁₄ O₃ . C₅
H₈ O₂ . Unspecified)x
CCI PMS

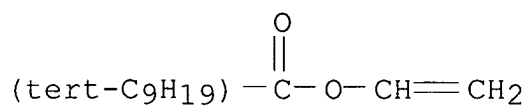
CM 4

CRN 96510-63-3
CMF Unspecified
CCI MAN

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CM 5

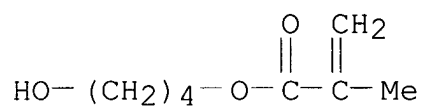
CRN 26544-09-2
CMF C₁₂ H₂₂ O₂
CCI IDS



CM 6

CRN 997-46-6

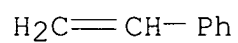
CMF C8 H14 O3



CM 7

CRN 100-42-5

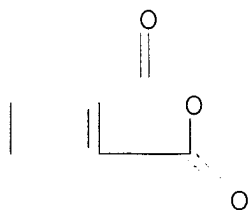
CMF C8 H8



CM 8

CRN 85-44-9

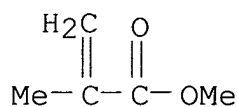
CMF C8 H4 O3



CM 9

CRN 80-62-6

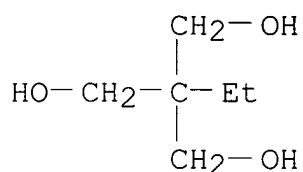
CMF C5 H8 O2



CM 10

CRN 77-99-6

CMF C6 H14 O3



RN 182698-81-3 HCAPLUS

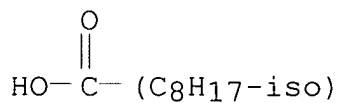
CN tert-Decanoic acid, ethenyl ester, polymer with ethenylbenzene,
 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 4-hydroxybutyl
 2-methyl-2-propenoate, 1,3-isobenzofurandione, methyl
 2-methyl-2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-
 triazine-2,4,6(1H,3H,5H)-trione, benzoate isononanoate (9CI) (CA
 INDEX NAME)

CM 1

CRN 26896-18-4

CMF C9 H18 O2

CCI IDS



CM 2

CRN 65-85-0

CMF C7 H6 O2



CM 3

CRN 182479-15-8

CMF (C24 H36 N6 O6 . C12 H22 O2 . C8 H14 O3 . C8 H8 . C8 H4 O3 .
C6 H14 O3 . C5 H8 O2) x

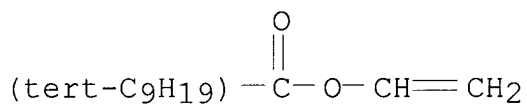
CCI PMS

CM 4

CRN 26544-09-2

CMF C12 H22 O2

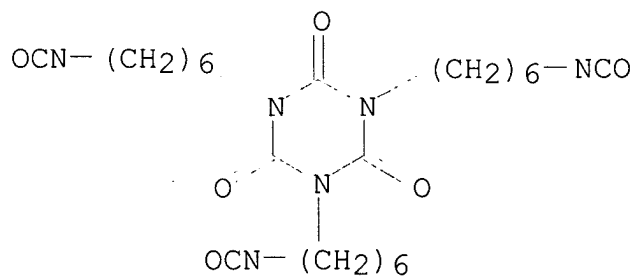
CCI IDS



CM 5

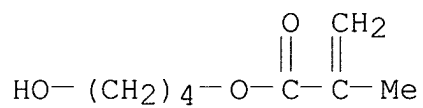
CRN 3779-63-3

CMF C24 H36 N6 O6



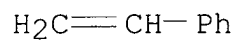
CM 6

CRN 997-46-6
CMF C8 H14 O3



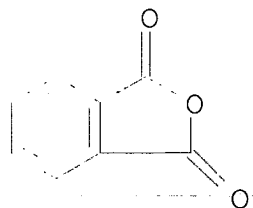
CM 7

CRN 100-42-5
CMF C8 H8



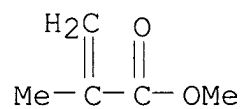
CM 8

CRN 85-44-9
CMF C8 H4 O3



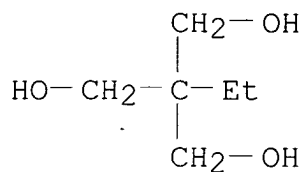
CM 9

CRN 80-62-6
CMF C5 H8 O2



CM 10

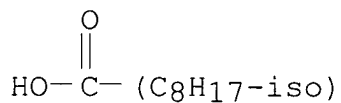
CRN 77-99-6
CMF C6 H14 O3



RN 182698-82-4 HCAPLUS
CN tert-Decanoic acid, ethenyl ester, polymer with Desmodur N 3390, ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 2-hydroxyethyl 2-methyl-2-propenoate, 1,3-isobenzofurandione and methyl 2-methyl-2-propenoate, benzoate isononanoate (9CI) (CA INDEX NAME)

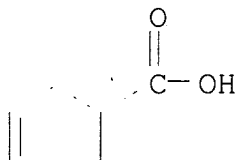
CM 1

CRN 26896-18-4
CMF C9 H18 O2
CCI IDS



CM 2

CRN 65-85-0
CMF C7 H6 O2



CM 3

CRN 182479-20-5
 CMF (C12 H22 O2 . C8 H8 . C8 H4 O3 . C6 H14 O3 . C6 H10 O3 . C5
 H8 O2 . Unspecified)x
 CCI PMS

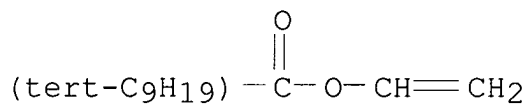
CM 4

CRN 96510-63-3
 CMF Unspecified
 CCI MAN

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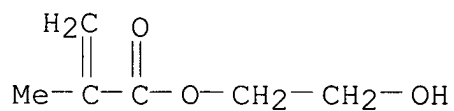
CM 5

CRN 26544-09-2
 CMF C12 H22 O2
 CCI IDS



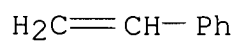
CM 6

CRN 868-77-9
 CMF C6 H10 O3



CM 7

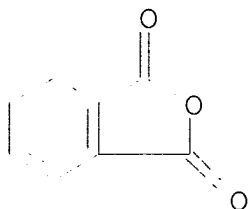
CRN 100-42-5
 CMF C8 H8



CM 8

CRN 85-44-9

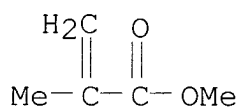
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CM 9

CRN 80-62-6

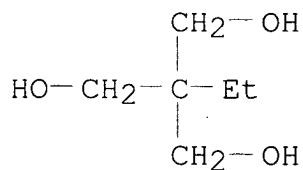
CMF C5 H8 O2



CM 10

CRN 77-99-6

CMF C6 H14 O3



RN 182698-83-5 HCAPLUS

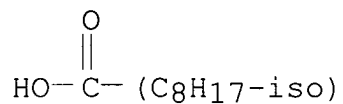
CN tert-Decanoic acid, ethenyl ester, polymer with ethenylbenzene,
 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 2-hydroxyethyl
 2-methyl-2-propenoate, 1,3-isobenzofurandione, methyl
 2-methyl-2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-
 triazine-2,4,6(1H,3H,5H)-trione, benzoate isononanoate (9CI) (CA
 INDEX NAME)

CM 1

CRN 26896-18-4

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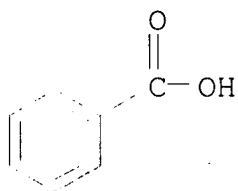
CCI IDS



CM 2

CRN 65-85-0

CMF C7 H6 O2



CM 3

CRN 182479-24-9

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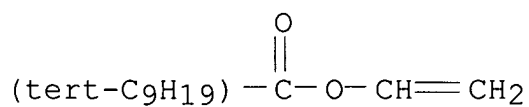
CCI PMS

CM 4

CRN 26544-09-2

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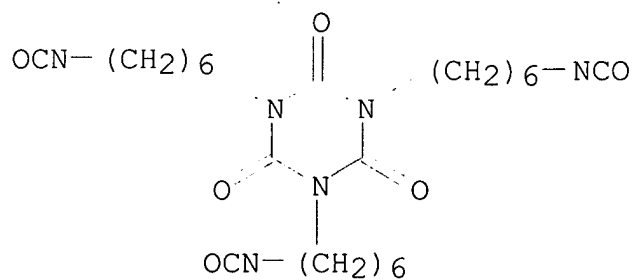
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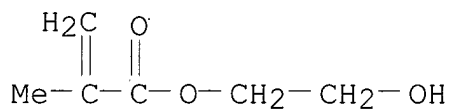
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CM 6

CRN 868-77-9

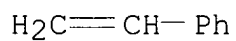
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CM 7

CRN 100-42-5

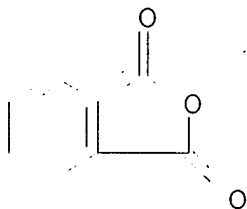
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CM 8

CRN 85-44-9

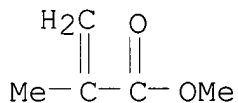
CMF C8 H4 O3



CM 9

CRN 80-62-6

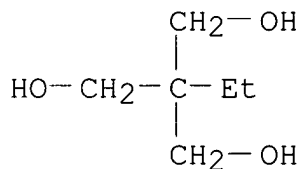
CMF C5 H8 O2



CM 10

CRN 77-99-6

CMF C6 H14 O3



RN 182698-84-6 HCAPLUS

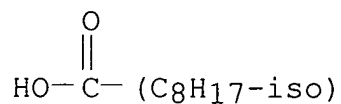
CN tert-Decanoic acid, ethenyl ester, polymer with Desmodur N 3390, ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 4-hydroxybutyl 2-methyl-2-propenoate, 1,3-isobenzofurandione and methyl 2-methyl-2-propenoate, (1,1-dimethylethyl)benzoate isononanoate (9CI) (CA INDEX NAME)

CM 1

CRN 26896-18-4

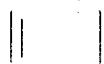
CMF C9 H18 O2

CCI IDS



CM 2

CRN 1320-16-7
CMF C11 H14 O2
CCI IDS

D1-CO₂H

D1-Bu-t

CM 3

CRN 182479-11-4
CMF (C12 H22 O2 . C8 H14 O3 . C8 H8 . C8 H4 O3 . C6 H14 O3 . C5
H8 O2 . Unspecified)x
CCI PMS

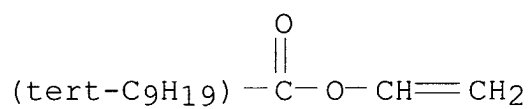
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CRN 96510-63-3
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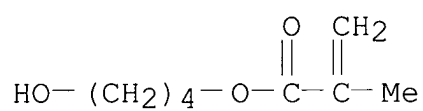
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CCI IDS



CM 6

CRN 997-46-6

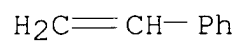
CMF C8 H14 O3



CM 7

CRN 100-42-5

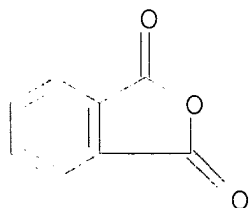
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CM 8

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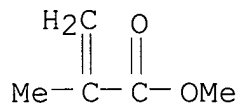
CMF C8 H4 O3



CM 9

CRN 80-62-6

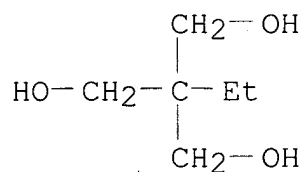
CMF C5 H8 O2



CM 10

CRN 77-99-6

CMF C6 H14 O3



RN 182698-85-7 HCAPLUS

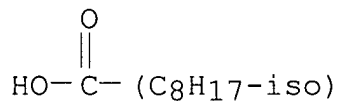
CN tert-Decanoic acid, ethenyl ester, polymer with ethenylbenzene,
 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 2-hydroxyethyl
 2-methyl-2-propenoate, 1,3-isobenzofurandione, methyl
 2-methyl-2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-
 triazine-2,4,6(1H,3H,5H)-trione, (1,1-dimethylethyl)benzoate
 isononanoate (9CI) (CA INDEX NAME)

CM 1

CRN 26896-18-4

CMF C9 H18 O2

CCI IDS



CM 2

CRN 1320-16-7

CMF C11 H14 O2

CCI IDS

D1-CO₂H

D1-Bu-t

CM 3

CRN 182479-15-8

CMF (C24 H36 N6 O6 . C12 H22 O2 . C8 H14 O3 . C8 H8 . C8 H4 O3 .
C6 H14 O3 . C5 H8 O2)x

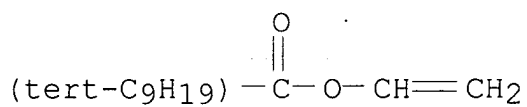
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CM 4

CRN 26544-09-2

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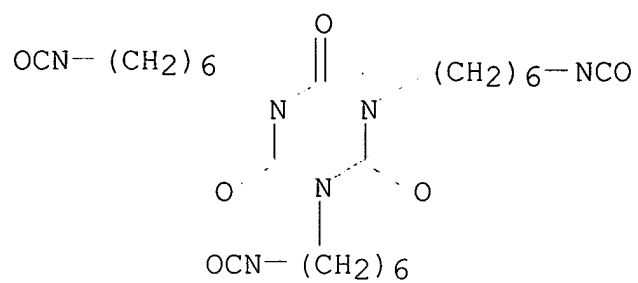
CCI IDS



CM 5

CRN 3779-63-3

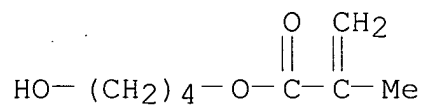
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CM 6

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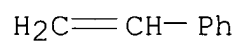
CMF C8 H14 O3



CM 7

CRN 100-42-5

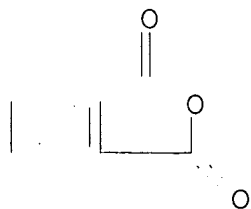
CMF C8 H8



CM 8

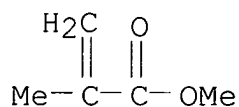
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CMF C8 H4 O3



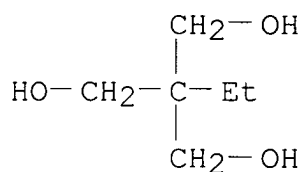
CM 9

CRN 80-62-6
CMF C5 H8 O2



CM 10

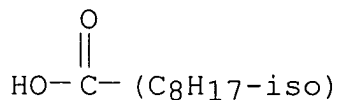
CRN 77-99-6
CMF C6 H14 O3



RN 182698-86-8 HCAPLUS
CN tert-Decanoic acid, ethenyl ester, polymer with Desmodur N 3390, ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 4-hydroxybutyl 2-methyl-2-propenoate, 1,3-isobenzofurandione and methyl 2-methyl-2-propenoate, isononanoate (9CI) (CA INDEX NAME)

CM 1

CRN 26896-18-4
CMF C9 H18 O2
CCI IDS



CM 2

CRN 182479-11-4

CMF (C12 H22 O2 . C8 H14 O3 . C8 H8 . C8 H4 O3 . C6 H14 O3 . C5
H8 O2 . Unspecified)x
CCI PMS

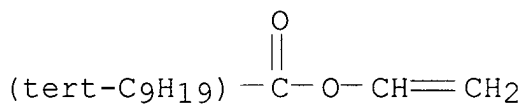
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CCI MAN

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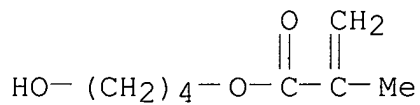
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CMF C12 H22 O2
CCI IDS



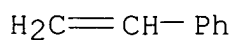
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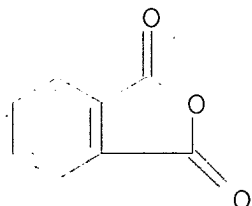
CM 6

CRN 100-42-5
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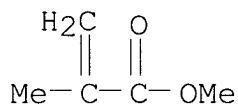
CM 7

CRN 85-44-9
CMF C8 H4 O3



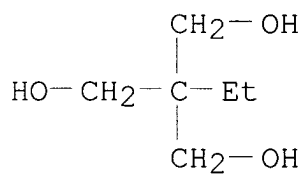
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CRN 80-62-6
CMF C5 H8 O2



CM 9

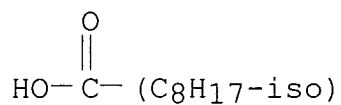
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RN 182698-87-9 HCAPLUS
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2-methyl-2-propenoate, 1,3-isobenzofurandione, methyl
2-methyl-2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-
triazine-2,4,6(1H,3H,5H)-trione, isononanoate (9CI) (CA INDEX
NAME)

CM 1

CRN 26896-18-4
 CMF C9 H18 O2
 CCI IDS

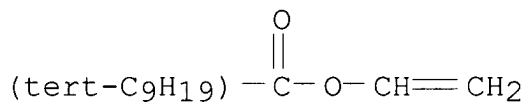


CM 2

CRN 182479-15-8
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 C6 H14 O3 . C5 H8 O2)x
 CCI PMS

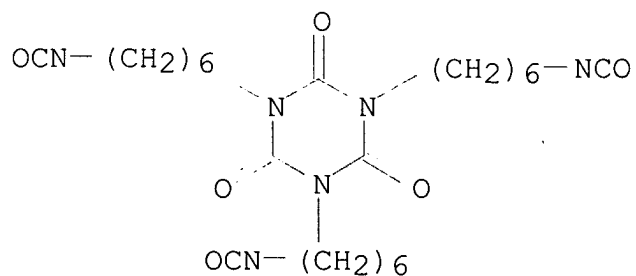
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 CCI IDS



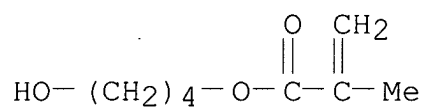
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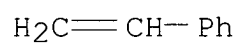
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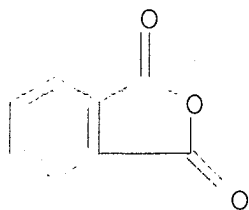
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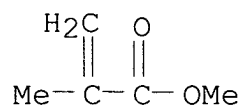
CM 7

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CMF C8 H4 O3



CM 8

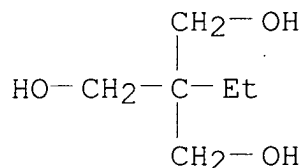
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CMF C5 H8 O2



CM 9

CRN 77-99-6

CMF C6 H14 O3



IC ICM C08G018-40

ICS C08G018-63; C08G018-65; C09D151-08; C09D175-04

CC 42-10 (Coatings, Inks, and Related Products)

IT **182698-80-2P 182698-81-3P 182698-82-4P****182698-83-5P 182698-84-6P 182698-85-7P****182698-86-8P 182698-87-9P**

(composition based on a polyacrylate resin containing **hydroxyl** groups with long pot-life for automotive coatings with good leveling and solvent and masking **resistance**)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 45 OF 45 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:641335 HCAPLUS

DOCUMENT NUMBER: 125:278784

TITLE: Coating composition based on a binder containing hydroxyl groups, and its use in processes for the production of coatings

INVENTOR(S): Shepler, Stewart; Rubbert, B.; Borghalte, O.; Hallmann, O.; Perisse, Philip; Tye, Anthony; Bajc, Gerald

PATENT ASSIGNEE(S): BASF Corporation, USA

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
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EP 812336	A1	19971217	EP 1996-910353	1996 0227
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0228

US 1995-396030

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1995

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WO 1996-US2794

W

1996

0227

AB The present invention relates to coating compns. comprising (A) at least one binder containing hydroxyl groups, (B) at least one crosslinking agent and (C) at least one aromatic mono- and/or polycarboxylic acid and/or at least anhydride of an aromatic mono- and/or polycarboxylic acid. The compns. exhibit good pot life and spray-mist assimilation, provide coatings with good leveling and solvent and masking resistance, and are useful for large-size vehicles. A typical composition contained 169.3 parts dispersion containing carbon black 1.6, 10.9:27.5:17.6:24:20 Bu acrylate-hydroxyethyl methacrylate-isodecyl methacrylate-Me methacrylate-styrene copolymer (number-average mol. weight 2500) 53.8, dispersion aid 2.1, and solvent 42.5%, 82.8 parts polyisocyanate, 72.6 parts mixture containing 4.1% UV absorber, dibutyltin dilaurate, and slip and mar additives in 95.9% solvent. and 0.8 parts BzOH.

IT **182698-80-2P 182698-81-3P 182698-82-4P**
182698-83-5P 182698-84-6P 182698-85-7P
182698-86-8P 182698-87-9P

(compns. based on binders containing **hydroxyl** groups with good pot-life for coatings with good leveling and solvent and masking **resistance**)

RN 182698-80-2 HCAPLUS

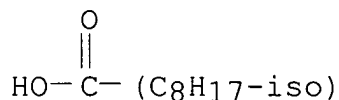
CN tert-Decanoic acid, ethenyl ester, polymer with Desmodur N 3390, ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 4-hydroxybutyl 2-methyl-2-propenoate, 1,3-isobenzofurandione and methyl 2-methyl-2-propenoate, benzoate isononanoate (9CI) (CA INDEX NAME)

CM 1

CRN 26896-18-4

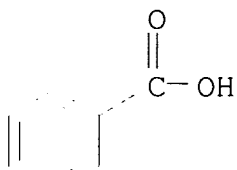
CMF C9 H18 O2

CCI IDS



CM 2

CRN 65-85-0
 CMF C7 H6 O2



CM 3

CRN 182479-11-4
 CMF (C12 H22 O2 . C8 H14 O3 . C8 H8 . C8 H4 O3 . C6 H14 O3 . C5
 H8 O2 . Unspecified)x
 CCI PMS

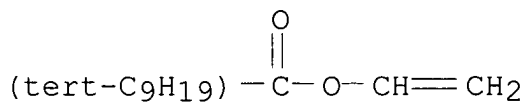
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 CMF Unspecified
 CCI MAN

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CM 5

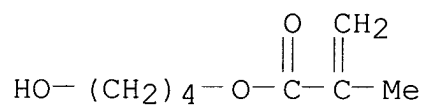
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 CCI IDS



CM 6

CRN 997-46-6

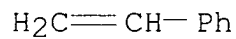
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CM 7

CRN 100-42-5

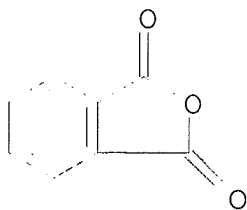
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CM 8

CRN 85-44-9

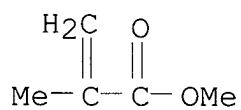
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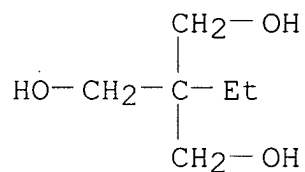
CRN 80-62-6

CMF C5 H8 O2



CM 10

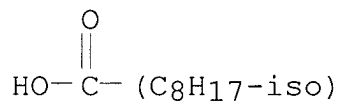
CRN 77-99-6
CMF C6 H14 O3



RN 182698-81-3 HCAPLUS
CN tert-Decanoic acid, ethenyl ester, polymer with ethenylbenzene,
2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 4-hydroxybutyl
2-methyl-2-propenoate, 1,3-isobenzofurandione, methyl
2-methyl-2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-
triazine-2,4,6(1H,3H,5H)-trione, benzoate isononanoate (9CI) (CA
INDEX NAME)

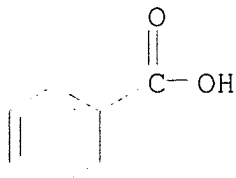
CM 1

CRN 26896-18-4
CMF C9 H18 O2
CCI IDS



CM 2

CRN 65-85-0
CMF C7 H6 O2

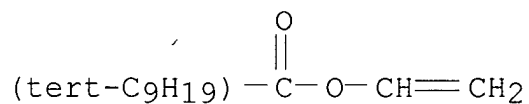


CM 3

CRN 182479-15-8
 CMF (C24 H36 N6 O6 . C12 H22 O2 . C8 H14 O3 . C8 H8 . C8 H4 O3 .
 C6 H14 O3 . C5 H8 O2)x
 CCI PMS

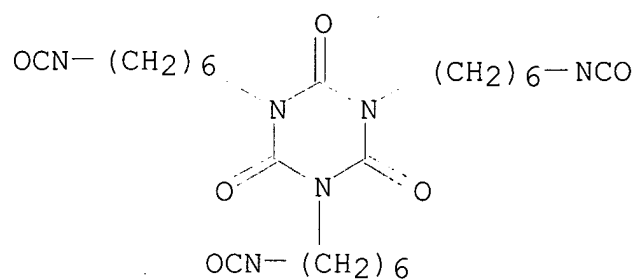
CM 4

CRN 26544-09-2
 CMF C12 H22 O2
 CCI IDS



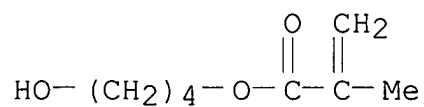
CM 5

CRN 3779-63-3
 CMF C24 H36 N6 O6



CM 6

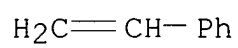
CRN 997-46-6
 CMF C8 H14 O3



CM 7

CRN 100-42-5

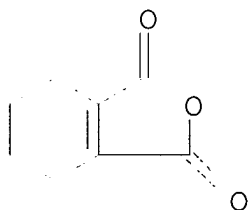
CMF C8 H8



CM 8

CRN 85-44-9

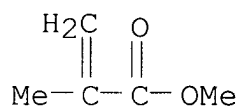
CMF C8 H4 O3



CM 9

CRN 80-62-6

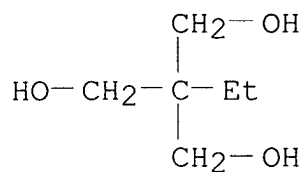
CMF C5 H8 O2



CM 10

CRN 77-99-6

CMF C6 H14 O3



RN 182698-82-4 HCAPLUS

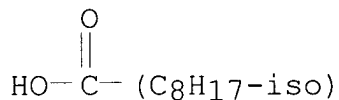
CN tert-Decanoic acid, ethenyl ester, polymer with Desmodur N 3390, ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 2-hydroxyethyl 2-methyl-2-propenoate, 1,3-isobenzofurandione and methyl 2-methyl-2-propenoate, benzoate isononanoate (9CI) (CA INDEX NAME)

CM 1

CRN 26896-18-4

CMF C9 H18 O2

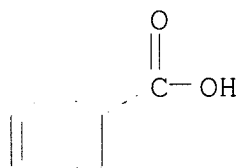
CCI IDS



CM 2

CRN 65-85-0

CMF C7 H6 O2



CM 3

CRN 182479-20-5

CMF (C12 H22 O2 . C8 H8 . C8 H4 O3 . C6 H14 O3 . C6 H10 O3 . C5 H8 O2 . Unspecified)x

CCI PMS

CM 4

CRN 96510-63-3

CMF Unspecified

CCI MAN

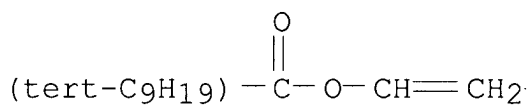
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 5

CRN 26544-09-2

CMF C12 H22 O2

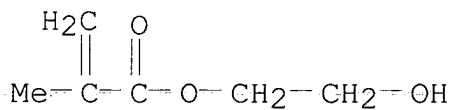
CCI IDS



CM 6

CRN 868-77-9

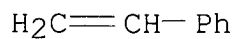
CMF C6 H10 O3



CM 7

CRN 100-42-5

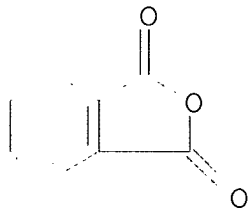
CMF C8 H8



CM 8

CRN 85-44-9

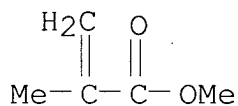
CMF C8 H4 O3



CM 9

CRN 80-62-6

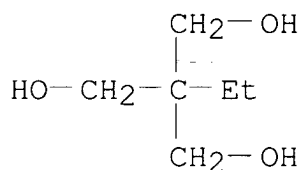
CMF C5 H8 O2



CM 10

CRN 77-99-6

CMF C6 H14 O3



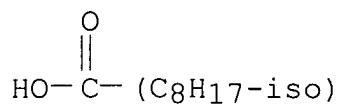
RN 182698-83-5 HCAPLUS

CN tert-Decanoic acid, ethenyl ester, polymer with ethenylbenzene,
 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 2-hydroxyethyl
 2-methyl-2-propenoate, 1,3-isobenzofurandione, methyl
 2-methyl-2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-
 triazine-2,4,6(1H,3H,5H)-trione, benzoate isononanoate (9CI) (CA
 INDEX NAME)

CM 1

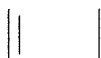
CRN 26896-18-4

CMF C9 H18 O2
CCI IDS



CM 2

CRN 65-85-0
CMF C7 H6 O2

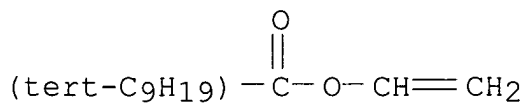


CM 3

CRN 182479-24-9
CMF (C24 H36 N6 O6 . C12 H22 O2 . C8 H8 . C8 H4 O3 . C6 H14 O3 .
C6 H10 O3 . C5 H8 O2) x
CCI PMS

CM 4

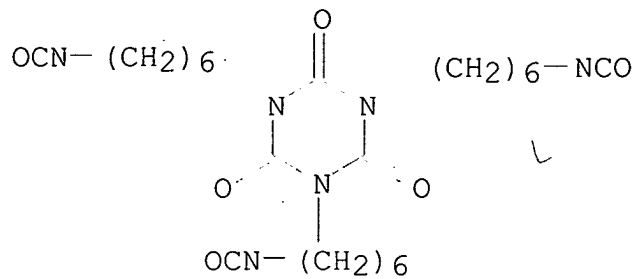
CRN 26544-09-2
CMF C12 H22 O2
CCI IDS



CM 5

CRN 3779-63-3

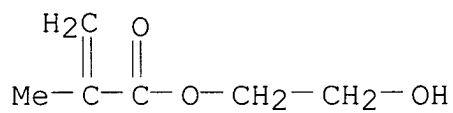
CMF C24 H36 N6 O6



CM 6

CRN 868-77-9

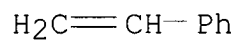
CMF C6 H10 O3



CM 7

CRN 100-42-5

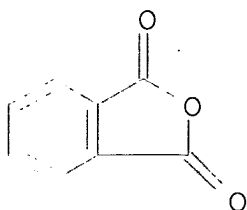
CMF C8 H8



CM 8

CRN 85-44-9

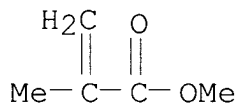
CMF C8 H4 O3



CM 9

CRN 80-62-6

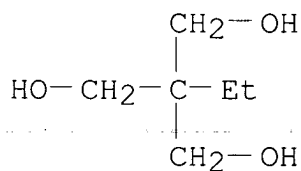
CMF C5 H8 O2



CM 10

CRN 77-99-6

CMF C6 H14 O3



RN 182698-84-6 HCAPLUS

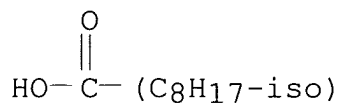
CN tert-Decanoic acid, ethenyl ester, polymer with Desmodur N 3390, ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 4-hydroxybutyl 2-methyl-2-propenoate, 1,3-isobenzofurandione and methyl 2-methyl-2-propenoate, (1,1-dimethylethyl)benzoate isononanoate (9CI) (CA INDEX NAME)

CM 1

CRN 26896-18-4

CMF C9 H18 O2

CCI IDS



CM 2

CRN 1320-16-7
 CMF C11 H14 O2
 CCI IDS

D1-CO₂H

D1-Bu-t

CM 3

CRN 182479-11-4
 CMF (C12 H22 O2 . C8 H14 O3 . C8 H8 . C8 H4 O3 . C6 H14 O3 . C5
 H8 O2 . Unspecified)x
 CCI PMS

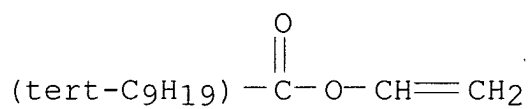
CM 4

CRN 96510-63-3
 CMF Unspecified
 CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 5

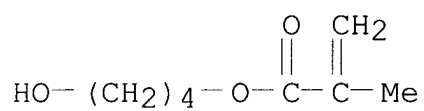
CRN 26544-09-2
 CMF C12 H22 O2
 CCI IDS



CM 6

CRN 997-46-6

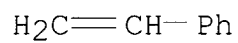
CMF C8 H14 O3



CM 7

CRN 100-42-5

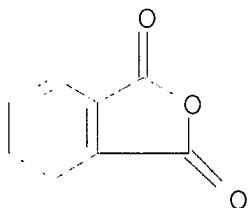
CMF C8 H8



CM 8

CRN 85-44-9

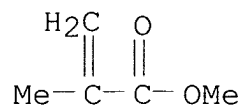
CMF C8 H4 O3



CM 9

CRN 80-62-6

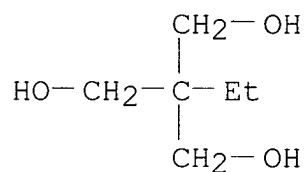
CMF C5 H8 O2



CM 10

CRN 77-99-6

CMF C6 H14 O3



RN 182698-85-7 HCAPLUS

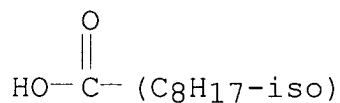
CN tert-Decanoic acid, ethenyl ester, polymer with ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 2-hydroxyethyl 2-methyl-2-propenoate, 1,3-isobenzofurandione, methyl 2-methyl-2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione, (1,1-dimethylethyl)benzoate isononanoate (9CI) (CA INDEX NAME)

CM 1

CRN 26896-18-4

CMF C9 H18 O2

CCI IDS



CM 2

CRN 1320-16-7

CMF C11 H14 O2

CCI IDS

D1-CO₂H

D1-Bu-t

CM 3

CRN 182479-15-8

CMF (C24 H36 N6 O6 . C12 H22 O2 . C8 H14 O3 . C8 H8 . C8 H4 O3 .
C6 H14 O3 . C5 H8 O2) x

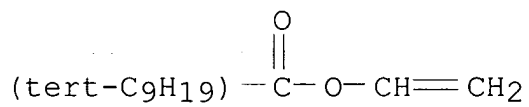
CCI PMS

CM 4

CRN 26544-09-2

CMF C12 H22 O2

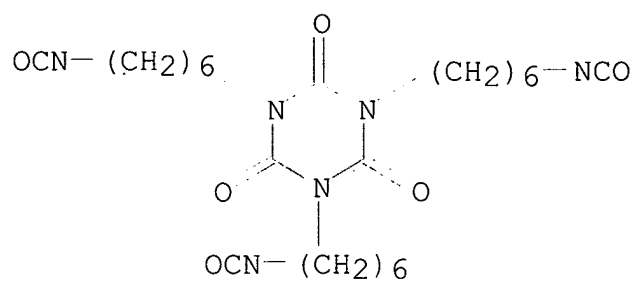
CCI IDS



CM 5

CRN 3779-63-3

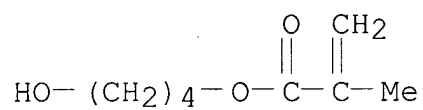
CMF C24 H36 N6 O6



CM 6

CRN 997-46-6

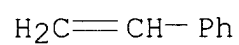
CMF C8 H14 O3



CM 7

CRN 100-42-5

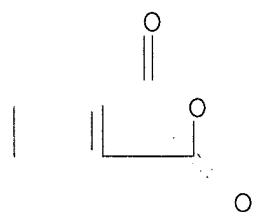
CMF C8 H8



CM 8

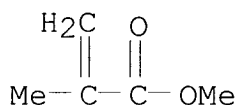
CRN 85-44-9

CMF C8 H4 O3



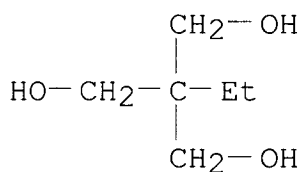
CM 9

CRN 80-62-6
CMF C5 H8 O2



CM 10

CRN 77-99-6
CMF C6 H14 O3

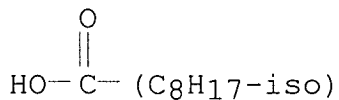


RN 182698-86-8 HCAPLUS

CN tert-Decanoic acid, ethenyl ester, polymer with Desmodur N 3390,
ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol,
4-hydroxybutyl 2-methyl-2-propenoate, 1,3-isobenzofurandione and
methyl 2-methyl-2-propenoate, isononanoate (9CI) (CA INDEX NAME)

CM 1

CRN 26896-18-4
CMF C9 H18 O2
CCI IDS



CM 2

CRN 182479-11-4

CMF (C12 H22 O2 . C8 H14 O3 . C8 H8 . C8 H4 O3 . C6 H14 O3 . C5
H8 O2 . Unspecified)x
CCI PMS

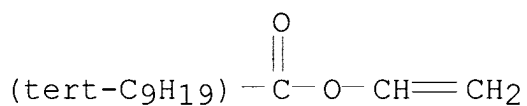
CM 3

CRN 96510-63-3
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

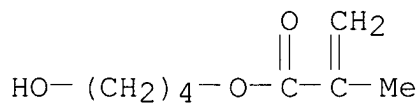
CM 4

CRN 26544-09-2
CMF C12 H22 O2
CCI IDS



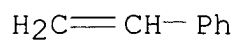
CM 5

CRN 997-46-6
CMF C8 H14 O3



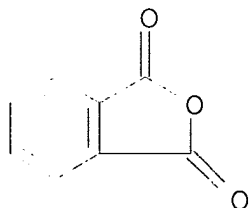
CM 6

CRN 100-42-5
CMF C8 H8



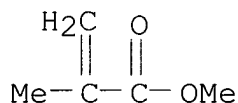
CM 7

CRN 85-44-9
CMF C8 H4 O3



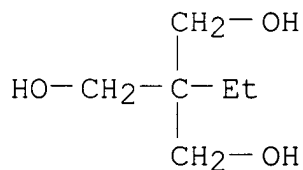
CM 8

CRN 80-62-6
CMF C5 H8 O2



CM 9

CRN 77-99-6
CMF C6 H14 O3

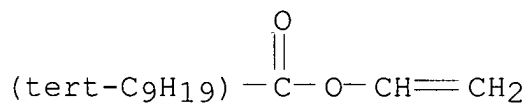


RN 182698-87-9 HCAPLUS
CN tert-Decanoic acid, ethenyl ester, polymer with ethenylbenzene,
2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 2-hydroxyethyl
2-methyl-2-propenoate, 1,3-isobenzofurandione, methyl
2-methyl-2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-
triazine-2,4,6(1H,3H,5H)-trione, isononanoate (9CI) (CA INDEX
NAME)

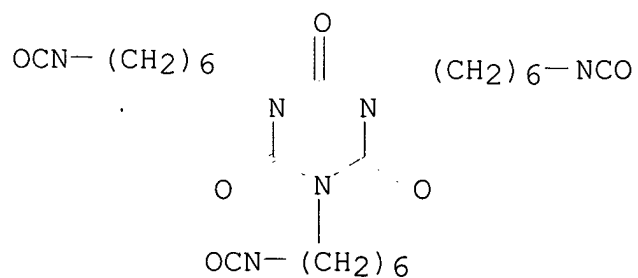
CM 1

$$\text{HO}-\overset{\text{O}}{\parallel}\text{C}-(\text{C}_8\text{H}_{17}\text{-iso})$$

CRN 26544-09-2
CMF C12 H22 O2
CCI IDS



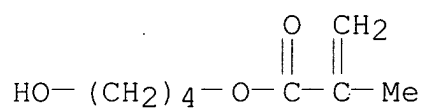
CRN 3779-63-3
CMF C24 H36 N6 O6



CM 5

CRN 997-46-6

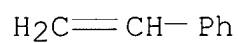
CMF C8 H14 O3



CM 6

CRN 100-42-5

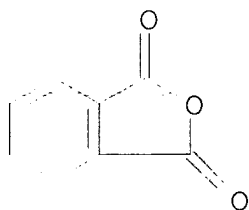
CMF C8 H8



CM 7

CRN 85-44-9

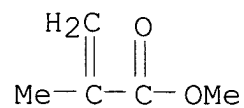
CMF C8 H4 O3



CM 8

CRN 80-62-6

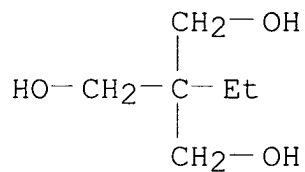
CMF C5 H8 O2



CM 9

CRN 77-99-6

CMF C6 H14 O3



IC ICM C08G018-28

ICS C09D175-04

CC 42-10 (Coatings, Inks, and Related Products)

IT **182698-80-2P 182698-81-3P 182698-82-4P****182698-83-5P 182698-84-6P 182698-85-7P****182698-86-8P 182698-87-9P**

(compns. based on binders containing **hydroxyl** groups with good pot-life for coatings with good leveling and solvent and masking **resistance**)